

THIRD EDITION 1998

PREFACE

It is my privilege to introduce and to preface this newly created publication of the Royal Scottish Pipe Band Association.

A primary stated object of the Association is “to promote and encourage the culture and advancement of Pipe Band Music internationally” and this new imaginative and comprehensive learning aid has been compiled with this object to the fore.

The thoughtful progressive fusion of traditional views and modern educational methods has produced a publication which will be gratefully received and widely used as an invaluable aid to practical and theoretical advancement.

I feel assured that the pages which follow will provide challenge, guidance and inspiration to all people throughout the world who are interested in this musical aspect of our Scottish heritage.

E. Sturgeon

PRESIDENT, 1998 to 1993

INTRODUCTION

This instructional material has been developed by the Music Board of The Royal Scottish Pipe Band Association and covers the revised curriculum of the Elementary Certificate course.

A glance through the publication will confirm that it has been prepared with the student or learner very much in mind. It is divided into lessons which are prescribed pieces of learning, each of which can be treated almost as an entity or complete step in itself. Every lesson is followed by a worksheet which includes questions to be answered in either oral or written form and is designed to test and amplify the student's understanding of the particular subject area.

The method of presentation is intended to allow effective use of the material in a distance learning situation, where the student has limited or perhaps no access to formal instruction. It shall also be used by qualified instructors running approved R.S.P.B.A courses.

Book 1 is the first publication by the Music Board in a series of education aids designed to allow pipers and drummers to develop their theoretical and practical musical expertise. Knowledge and understanding of the contents will well equip any candidate to present themselves for the relevant level of the R.S.P.B.A examinations.

Thanks are extended to all who assisted in the development and production of our education material, especially James Wark and John Kennedy for supplying the first draft of the lessons and the eventual amalgamation of the total publication by the Work Group from the Music Board comprising: -

Thomas Andrews	
David Clark	
Iain Duncan	- Graphics and Presentation Co-ordinator
John Kennedy	
John MacAllister	
John MacInnes	
James Wark	
Wilson Young	- Group Co-ordinator

Special acknowledgment is given to Miss S. Sutherland for her time, patience and co-operation in typing the final presentation.

DR. R. A. DEUCHAR
MUSIC BOARD CONVENER, 1990

TECHNIQUES OF STUDY

Whether in the formal class situation or working at home it is important that the student develops a responsible attitude to learning and study which suits their particular circumstances. Study is difficult and demanding work but it can also be very enjoyable and personally rewarding as your knowledge and practical ability develop.

A feature of this presentation is that students can progress through the theory or practical aspects of the work at a pace which is consistent with their particular level of ability in each area, thereby avoiding the frustration of being held back say in the practical side because their theoretical knowledge does not match their practical ability, or vice versa.

In order that full advantage may be taken of these features it is suggested that the following broad guide-lines be adopted in approach to effective study.

1. Plan in advance how you intend to progress through the theory part of the curriculum. I.e.; sequentially – Lesson 1 followed by Lesson 2 etc. or perhaps in some other arrangement to suit your level of knowledge.
2. Organise your study and practice to avoid the trap of wasting time. Ask yourself whether you are really learning or thinking – or are you merely frittering away your time?
3. Understanding is the key to learning and remembering. If you understand a principle, it is easy to remember it and apply it in developing your practical musicianship.
4. In memorising details of musical theory, put your books aside from time to time and test yourself. This will help you to identify the points which are most difficult to recall and allow you to give them special attention.
5. Make a note of the points on which you are not clear and discuss them with your instructor or with an experienced piper or drummer.
6. Do remember that to write neat and clear musical notation takes practice so make sure that you spend sufficient time on this important aspect of your studies.
7. An instructor may find it beneficial to ask the student to study certain theory lessons at home at their own pace and concentrate on practical instruction in the classroom situation. Where this is done it is important that the instructor tests the understanding of the student on these particular theory lessons at the next formal teaching session and clarify any points of doubt.
8. Both pipers and drummers should study musical theory together and only when it comes to practical instruction should they be treated separately.

Not all these suggestions are necessarily suitable for every student, each person must develop the technique of study and practice which suits them best. But it is important to consider from time to time whether your study methods are most effective for you.

The Music Board wishes you every success in your studies.

The R.S.P.B.A Diamond Jubilee 1990

Composer :Malcom J. Brown - Scott
Drum Setting: Wilson Young

The musical score is arranged in four systems, each with three staves. The top staff is for the Snare Drum (S.D.), the middle for the Tom Drum (T.D.), and the bottom for the Bass Drum (B.D.). The key signature is one sharp (F#) and the time signature is 6/8. The score includes various musical notations such as slurs, accents, and dynamic markings (p, f, mf). Fingerings are indicated by numbers 1-5 above notes. The first system shows a complex S.D. pattern with a 9-measure slur, a 7-measure slur, and a 3-measure triplet. The second system continues with a 9-measure slur, a 7-measure slur, and a 3-measure triplet. The third system features a 7-measure slur, a 3-measure triplet, and a 5-measure slur. The fourth system includes a 7-measure slur, a 3-measure triplet, and a 9-measure slur. The drum parts are highly rhythmic and intricate, typical of a professional drum setting.

Musical score system 1, measures 1-4. The system includes a vocal line and a piano accompaniment. The piano part features a 9th fingering in the first measure, followed by a dynamic shift from *mf* to *f*. The second measure has a *mf* dynamic. The third and fourth measures feature a *p* dynamic with accents (>) over the notes.

2.

Musical score system 2, measures 5-8. The piano part begins with a *f* dynamic and a 9th fingering. The second measure has a *mf* dynamic and a 7th fingering. The third measure has a *f* dynamic with an accent (>) and a 3rd fingering. The fourth measure has a *mf* dynamic and a 9th fingering.

Musical score system 3, measures 9-12. The piano part starts with a *mf* dynamic and a 7th fingering, followed by a *f* dynamic and a 3rd fingering. The second measure has a *mf* dynamic and a 5th fingering. The third measure has a *f* dynamic with an accent (>) and a 6th fingering. The fourth measure has a *mf* dynamic and a 7th fingering.

1.

Musical score system 4, measures 13-16. The piano part begins with a *f* dynamic and a 3rd fingering, followed by a *mf* dynamic and a 5th fingering. The second measure has a *p* dynamic with an accent (>) and a 7th fingering. The third measure has a *f* dynamic with an accent (>) and a 3rd fingering. The fourth measure has a *mf* dynamic and a 9th fingering.

STRUCTURED LEARNING – THE ELEMENTARY CERTIFICATE

THEORY SYLLABUS

CONTENTS:

Sound

- 1.1. Production of Sound**
Originator, Vibrating body, Medium, Receptor.
- 1.2. The Characteristics of Sound**
Pitch, Volume, Quality.
- 1.3. Categories of Sound**
Musical, Unmusical.
- 1.4. Kinds of Musical Sounds**
Legato, Staccato.

Staff Notation

- 1.5. Introduction**
- 1.6. The Great Staff**
Scale, Tonic, Keynote, Octave, Interval, Degree, Middle C, Leger Line, Clef, Brace and the Compass of the Bagpipe.
- 1.7. The Short Staff and Clefs**
Numbering lines and spaces, Treble, Alto, Bass Clefs, pitch names of each line and space, Score Writing.

Duration

- 1.8. Sounds**
Note Names, Shapes, Value Table.
- 1.9. Rests**
Rest Names, Shapes, Related Note Values.
- 1.10. Lengthening Notes**
Dot, Double Dot, Tie or Bind, Pause.
- 1.11. Lengthening Rests**
Dot, Double Dot, Pause
- 1.12. Values**
Understanding Simple and Compound Values.
- 1.13. Music Patterns**

Rhythm, Kinds of Time, Bar Lines and Bars, Duple, Triple, Quadruple, Strong/Weak pulses

Bar lines - Single, Double and repeat Marks
Bars - Complete and Incomplete

Time Signatures

1.14. Simple and Compound Time

Sub-division of Beat Notes.

1.15. Time Signatures

Staff Notation

1.16. Tempo, Volume and Expression

1.17. Embellishments, Ornaments and Gracenotes

Writing Music

1.18.1 Introduction

1.18.3 Note Components

1.18.5 Grouping within Bars

1.18.7 Good Notation Practice

1.18.9 Irregular Groups

INDEX

1.26.1 TO 1.26.10

This index is a comprehensive listing of musical terms as found in the lessons in Structured Learning, Books 1, 2 and 3.

STRUCTURED LEARNING – THE ELEMENTARY CERTIFICATE

PIPING AND DRUMMING PRACTICAL

THE GREAT HIGHLAND BAGPIPE

Introduction

1.19.1 to 1.19.3 Tutor

Holding the chanter and naming the fingers.
Fingering Diagrams
Up and Down the Scale

1.19.4 INTRODUCING GRACENOTES

Exercise No. 1 – The Scale with High “G” and High “A” Gracenotes
Exercise No. 2 – Hand Changing exercise with “G” Gracenote.

1.19.5 Exercise No. 3 – Strikes

Exercise No. 4 – Introducing “D” Gracenotes with “G” Gracenote

1.19.6 Exercise No. 5 – Developing “G”, “D”, and “E” Gracenote

Exercise No. 6 – “Tachum” Movement.

1.19.7 INTRODUCING DOUBLINGS

Exercise No. 7 – High “A” and High “G” Doublings.

Exercise No. 8 – “F” and “E” Doublings.

1.19.8 Exercise No. 9 – Light Throw, Doubling and Strike on “D”.

Exercise No.10 – Doublings on “C”, “B”, “Low A” and “Low G”.

1.19.9 Exercise No. 11 – Miscellaneous Exercises involving doublings.

Exercise No. 12 – The Round Movement – Doublings

Exercise No. 13 – Birl on “Low A”

1.20.1 PRACTICAL – BAGPIPE DESCRIPTION/MAINTENANCE

General Description.

Specific Description :- Bag.

1.20.2 to 1.20.4 Specific Description :- Bag, Bag Seam, Stocks, Chanter, Drones, Blowstick, to Mouthpiece.
Maintenance.

1.20.5 PARTS OF THE GREAT HIGHLAND BAGPIPE (DIAGRAM)

1.20.6 SECTIONED PARTS OF THE GREAT HIGHLAND BAGPIPES (DIAGRAM)

1.20.7 COMMON PROBLEMS

Air loss : Wet Reeds

1.20.8 COMMON PROBLEMS

Top section of Drones dropping when being tuned.
Drones Squealing.
Chanter skirling or squealing.

1.20.9 HOW TO TUNE THE BAGPIPES

1.20.10 BLOWING THE BAGPIPES

1.21.1 THE SNARE DRUM TUTOR

The art and practice of the snare drum.
Holding the drumsticks.
The beating position

1.21.2 TUTOR NOTATION FORMAT

1.21.3 SINGLE STROKE BEATING

Exercise No. 1

1.21.4 COUNTING BEATS AND THEIR EQUIVALENT IN SIMPLE TIME

Exercise No. 2

1.21.5 COUNTING BEATS AND THEIR EQUIVALENT IN COMPOUND TIME

Exercise No. 3

1.21.6 COUNTING IRREGULAR GROUPS (TRIPLET)

Exercise No. 4

1.21.7 COUNTING IRREGULAR GROUPS (DUplet)

Exercise No. 5

1.21.8 FURTHER EXAMPLES OF COUNTING IN SIMPLE TIME

1.21.9 FURTHER EXAMPLES OF COUNTING IN COMPOUND TIME

1.21.10 SINGLE STROKE DEVELOPMENT

Exercise No. 6

1.21.11 STICK CONTROL EXERCISES

1.21.12 THE CLOSED ROLL

Exercise No. 7

1.21.13 FIVE STROKE ROLL DEVELOPMENT

Exercise No. 8

1.21.14 SEVEN STROKE ROLL DEVELOPMENT

Exercise No. 9

1.21.15 NINE STROKE ROLL DEVELOPMENT

Exercise No. 10

1.21.16 EXERCISES INCORPORATING THE 5, 7, AND 9 STROKE ROLLS.

1.21.17 THE PARADIDDLE

Exercise No. 11

1.21.18 THE FLAM EMBELLISHMENT

Exercise No. 12

1.21.19 FLAM MOVEMENT IN COMPOUND DUPE TIME

1.21.20 THE DRAG EMBELLISHMENT

1.21.21 Exercise No. 13

1.22.1 THE BASS DRUM TUTOR

The Sticks: The Holding Tapes and holding the Sticks.

1.22. 2 LEARNING TO BEAT

to

1.22.4 Exercise 1 - Simple Duple Time

Exercise 2 - Compound Duple Time

1.22.5 THE CROSS OVER

The Sticks: The holding Tapes and holding the Sticks.

1.22.2 LEARNING TO BEAT

to **Exercise No. 1** – Simple Time

1.22.4 Exercise No. 2 – Compound Time

1.22.5 THE CROSS OVER

Exercise No. 3

1.23.1 THE TENOR DRUM TUTOR

1.23.2

1.24.1 MONOTONE EXERCISES

1.25.1 PRACTICAL – DRUM DESCRIPTION/MAINTENANCE

to

1.25.3 General Description.

Specific Description.

Maintenance and Problems.

1.25.4 VIEW OF A 1990 MANUFACTURE 12 ROD SNARE DRUM (EXPLODED DIAGRAM)

1.1.1 Lesson 1

SOUND (PART 1)

Sound may be described as a series of disturbances in matter, to which the ear is sensitive.

The disturbances send vibrations through the air (the vibrations take the form of a pattern similar to the wave pattern which appears when a pebble is dropped into a pool of water), the vibrations enter the ear where they are converted into nervous impulses which register on the brain as sound. Sound can only be produced and registered if all four of the essential elements are present: -

- (1) **Originator**
Piper / Drummer
- (2) **Vibrating Body**
Reeds / Drumskins
- (3) **Medium**
Air / Water
- (4) **Receptor**
Ear

Should any one of these elements be missing, then sound cannot be produced.

The **ORIGINATOR** is the source of energy which sets the Vibrating Body into motion. This may be a piper forcing air through reeds or a drummer striking a drumskin.

The **VIBRATING BODY**, which when disturbed, or set in motion, sends vibrations through the medium. The Vibrating Body can be virtually anything, but for our purposes, we refer to the blades of a reed or drumskin as Vibrating Bodies.

Vibrations are measured in “**CYCLES PER SECOND**” or “**HERTZ**” (Hz). This is known as the frequency of the sound.

1.1.2

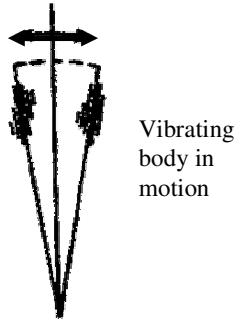
The **MEDIUM** through which vibrations travel may consist of any form of matter, however, the density of the medium affects the quality of the sound and its loudness, or volume. For humans, the best medium is air. It should be noted that in a vacuum, i.e., there is an absence of any medium, then no sound can be transmitted.

The **RECEPTOR** is normally the ear. In electronic recordings, the microphone is the Receptor. Some modern electronic devices are “**voice**” operated. Where the conditions make reception difficult, for example under water, nature sometimes overcomes this problem. The shark does not hear, but can detect slight vibrations through its highly sensitive nervous system, therefore its body becomes the Receptor.

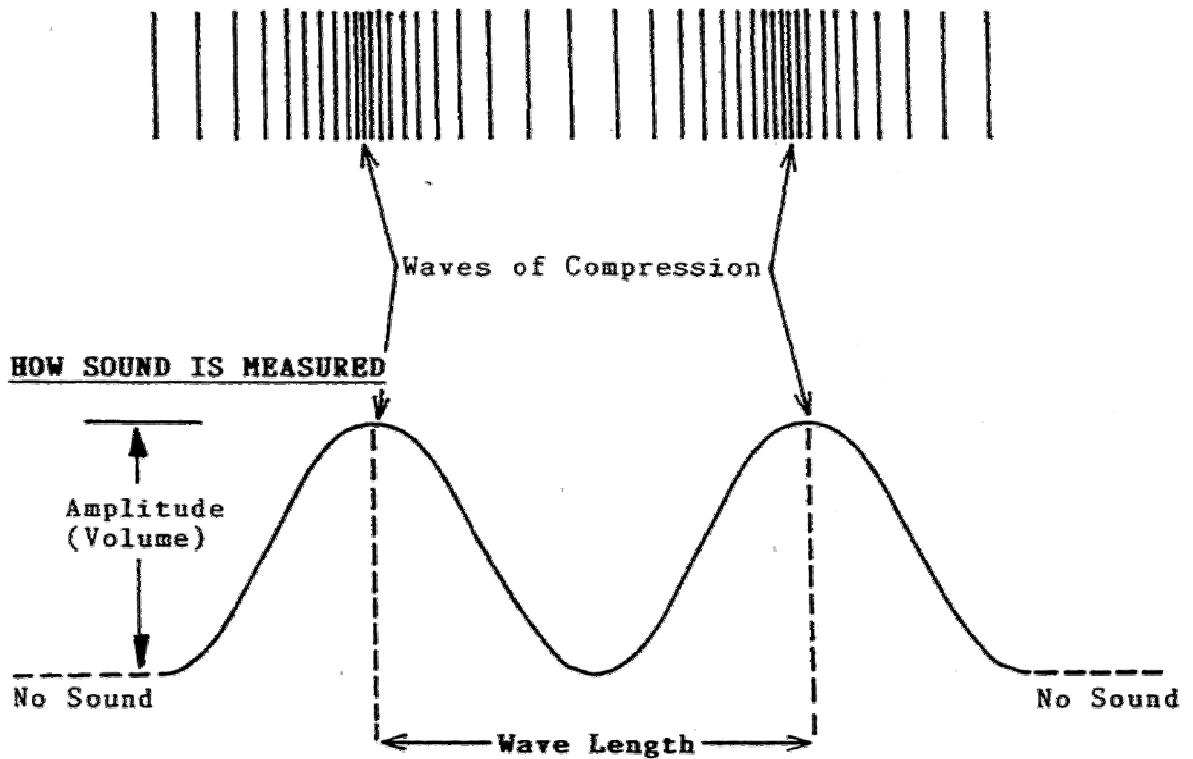
LESSON 1

SOUND (PART 1) – HOW SOUND IS CREATED AND MEASURED.

HOW SOUND IS CREATED



MEDIUM (Air, Water, etc.)



Measured in cycles per second (hertz).
Referred to as the Frequency of sound.

The above diagram shows a simplified relationship between amplitude (volume) and the frequency of sound.

1.1.4

LESSON 1 - WORKSHEET

ORAL WORK

1. What is sound?
2. How is sound produced?
3. How is sound measured
4. Why is the medium important in the perception of sound?
5. What essential elements must be present to produce sound?
6. Name the vibrating bodies involved in the production of sound in a pipe band
7. Name two sound receptors
8. Explain how sound is produced by the Great Highland Bagpipe and the Snare Drum

EXERCISES

1. Tap a solid surface and listen to the sound. Press your ear against the solid surface and listen to the same tap. This shows the importance of the medium in the perception of sound
2. Listen to the instructor playing the practice chanter from a distance.

Cup your hands behind your ears and listen again. Describe how the sounds differ as a result of the change in structure of the receptor. (**i.e.** your ears).
3. Using a Bagpipe Tuner, if available, measure the frequency of sounds produced by a practice chanter.

LESSON 2

SOUND (PART 2)

Characteristics of Sound

The characteristics of sound are: -

(1) Pitch

Height or depth of sound

(2) Volume

Loudness or softness – intensity of sound

(3) Quality

Timbre – tone quality

PITCH is the height or depth of sound and is evident as the difference in pitch between: -
e.g. An adult's voice and that of a child, or the rumble of traffic and the screech of brakes.

Pitch is measured by the number of vibrations generated by the vibrating body and this is expressed as "CYCLES PER SECOND" or Hertz (Hz).

The greater the number of cycles per second (Hz), the higher the pitch and conversely the lower the Hz, the lower the pitch.

In the bagpipe, the vibrating bodies, that is, the reeds, set columns of air vibrating along tubes – the chanter and the drones.

The length of the column of air has a direct influence on pitch. The longest drone, the Bass, is lower in the pitch than the shorter drones, the Tenor.

The chanter uses the same principle. The lowest note, Low G, is the furthest from the reed, therefore the air column is long, and, as the player raises fingers one after the other, to sound Low A, B etc., the column is shortened and the sound or notes are successively higher in pitch, (see page 1.2.3).

The different sizes of bass and tenor drums also indicate that principle of larger vibrating bodies giving lower sounds.

Other vibrating bodies such as bells, metal tubes, harp strings etc. indicate the relationships between size and pitch.

(In later lessons, vibrating body density and tension will be discussed, and how they affect pitch).

1.2.2

PITCH (CONT'D)

VOLUME is always called **AMPLITUDE** or **INTENSITY** is the degree of loudness or softness of a sound. Just as pitch indicates the frequency of sound, the word volume describes the amplitude – the distance between the peaks and troughs of the wave pattern (**See figure 2**).

QUALITY, also called **TIMBRE** or **COLOUR** is what distinguishes between sounds of the same pitch **e.g.** a trumpet from bagpipe, whether one piper has a better sound than another.

When a musical sound, or note, is produced, the quality of the sound is affected by other less easily heard/distinguished sounds which are produced at the same time as the main pitch note.

This central or main pitch note is called the '**FUNDAMENTAL**' and the other sounds which occur at the same time are called '**HARMONICS**', '**OVERTONES**', or '**PARTIALS**'.

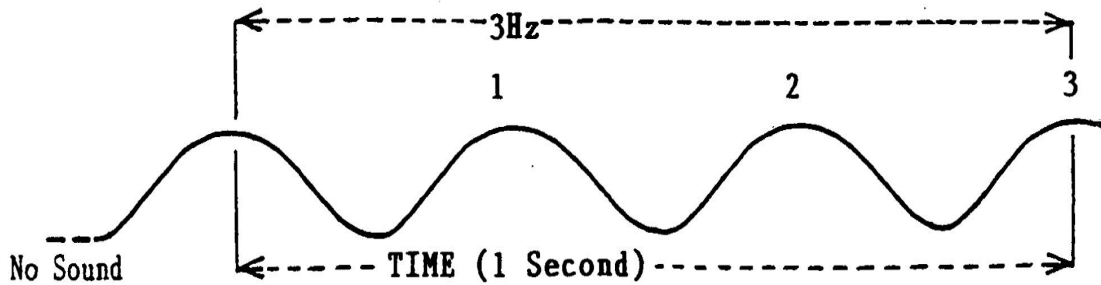
When two different instruments sound alike, this is due to the similarity of the harmonics.

(The characteristics of sound is discussed in greater detail at a later stage. This will include intervals, scales, semi-tones and accidentals.)

1.2.3

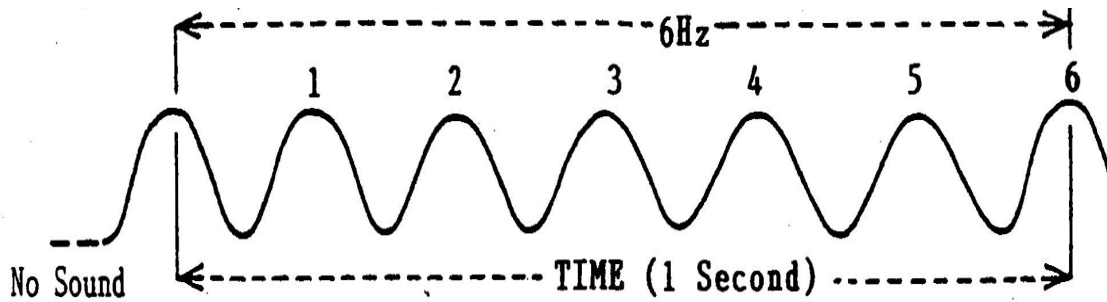
LOW PITCH

3 Vibrations per Second (3Hz)



HIGH PITCH

6 Vibrations per Second (6Hz)



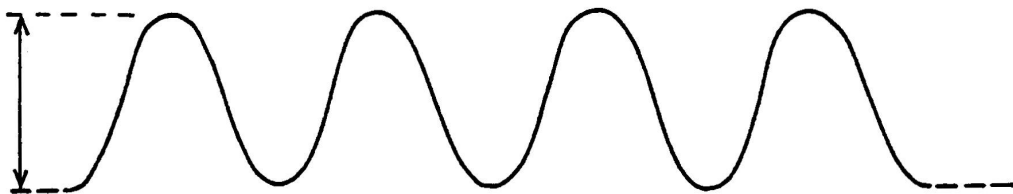
SOFT SOUND

Low Amplitude



LOUD SOUND

High Amplitude



LESSON 2 - WORKSHEET

ORAL WORK

1. Name the characteristics of sound.
2. What is meant by pitch and how is it measured?
3. How can drone pitch be altered in the Great Highland Bagpipes?
4. How are sounds of different pitches produced in the drum section of a pipe band?
5. What is meant by volume?
6. How is volume measured?
7. Give other names for sound quality.
8. What is the main pitch note called?
9. How is the quality or tone colour of a note affected?
10. When will two different instruments sound alike?

1.2.5

EXERCISES

1. Rank 1-4 in ascending order, a group of 4 notes of different pitch played by your instructor.
2. Rank in descending order 1-4 a group of sounds of varying volume made by your instructor.
3. Rank in order of your preference 1-4 a group of sounds with respect to timbre. **E.g.** 4 different practice chanters or 4 different instruments.
4. Identify by sound, all notes on the practice/pipe chanter.
5. Identify by sound, Bass/ Tenor/ Snare drums.
6. Using a set of tuned drones in a bagpipe with a stopper in the chanter stock: -

MOVE:

1. The bass drone up and down and listen to the change in sound quality
2. Do the same with a tenor drone.

LESSON 3

SOUND (PART 3)

Sound falls into two categories :-

- (1) **MUSICAL**
- (2) **UNMUSICAL SOUND (NOISE)**

The difference between musical and unmusical sound (or noise) can be shown graphically by the wave pattern the sounds produce.

A musical sound produces a regular, constant wave pattern, whereas the wave pattern for an unmusical sound is irregular and often broken.

Musical sound can be produced by a purpose built instrument which normally can be relied upon to constantly reproduce musical sounds in any random order, in exactly the same regular and constant wave pattern.

Unmusical sound (or noise) will seldom, if ever, reproduce the **same** pattern. If a metal tray is dropped on the floor from a particular height, the wave pattern is unlikely to be exactly reproduced regardless of the number of times it is dropped. The tray will always sound like a metal tray being dropped, and we may even distinguish differences in listening to each drop, but a measured wave pattern will show more accurately the differences between them.

(Further discussion will take place later regarding SOUND PRODUCTION from Musical Instruments).

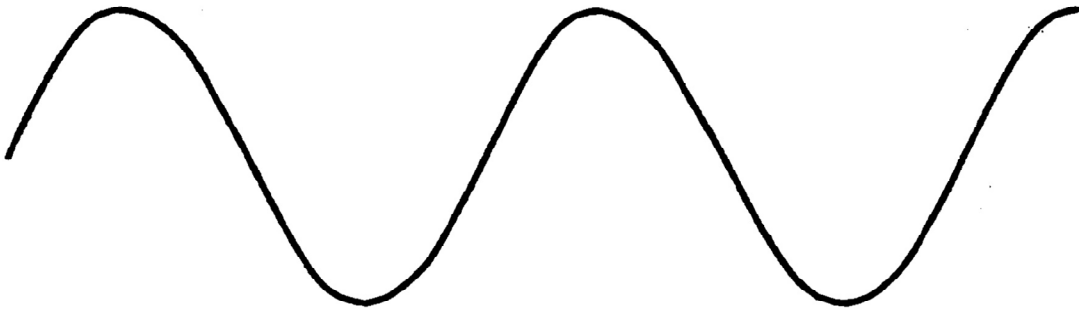
1.3.2

LESSON 3

SOUND (PART 3) - MUSICAL AND UNMUSICAL SOUND (NOISE)

MUSICAL WAVE PATTERN

Regular Waves



UNMUSICAL WAVE PATTERN

Irregular Waves



LESSON 3 - WORKSHEET

ORAL WORK

1. What are the two main categories into which sound can be divided?
2. Illustrate what is meant by the wave patterns produced by sound and give examples.
3. Show the wave pattern which you would expect from a sound produced by
 - a) A musical instrument.
 - b) A non-musical instrument.
4. In which of the following examples would you expect sound to be reproduced consistently and why?
 - a) From a pitch producing source.
 - b) From dropping a tray on the floor
5. Describe the category of sound which would produce a wave pattern which is irregular and broken.

EXERCISES

1. Stretch a piece of string between two points and pluck it with your finger. Note the wave pattern which is set up as the string vibrates between the two fixed points. This is similar to the principle of a guitar string which produces a consistent musical sound.
2. Take a small metal object and drop it lightly onto a wooden table from a fixed height and note the sound produced when it hits the table. If this experiment is repeated there will be slight differences in the sound produced. This illustrates the principle of non-musical sound.

LESSON 14

SOUNDS (PART 4)

All musical sounds differ in the following ways :-

(1) **Pitch**

Height or depth

(2) **Volume**

Loud or soft

(3) **Quality**

Timbre, tone, colour **e.g.** Thin, broad, harsh, soft etc.

(4) **Duration**

Length or value of sound

(5) **Accent**

Stress, emphasis, force, dominance etc.

KINDS OF MUSICAL SOUND

There are TWO kinds of musical sound :-

1. **Legato**

Smooth and connected



2. **Staccato**

Short and detached

1.4.2


Legato

Legato sounds are played so that each note connects smoothly with each successive note. This is sometimes shown in music as a curved line which is placed above

 or below  a group of notes of different pitch. Since this is the only kind of sound able to be produced on the bagpipe, no curved line (also called a 'slur') is shown on most bagpipe manuscripts.

Staccato

Staccato sounds are the opposite of **LEGATO** sounds and these are played so that there is a definite period of silence between each note.

This is shown as a dot above the note ()

The drum readily produces this type of sound and hence the Staccato sign is not used on drum manuscripts.

N.B A roll on the snare drum consists of a rapid succession of sounds, which, when played correctly, will give the impression of a Legato sound.

1.4.3

LESSON 4 - WORKSHEET

ORAL WORK

1. How many kinds of musical sounds are there and how are they described?
2. State the kinds of musical sounds produced by the following :-
 - a) The Bagpipe
 - b) The Snare Drum.
 - c) The Bass Drum.
3. Show the sign used in music to indicate the following :-
 - a) Smooth and flowing kind of sound.
 - b) Short and pinched kind of sound.
4. How can a smooth sustained sound appear to be produced on a snare drum?
5. State the various ways in which musical sounds can differ.

EXERCISES

1. Listen to the time signal (pips) played on the radio just before the News Broadcast and identify which of the six pips has the longest duration of sound.
2. Tap out four beats of uniform speed and volume on a table top counting one-two-three-four. Now slightly vary this by striking the first beat with greater force and continuing to repeat this pattern. Note the different effect this has on the sound produced.
3. Listen to any musical piece being played on the radio, TV, record player or tape cassette and try and pick out sounds that are being played :-
 - a) In a flowing and smooth manner (legato).
 - b) In a short pinched manner (Staccato).

LESSON 5

STAFF NOTATION (PART 1)

For over 2,500 years, a vast array of systems of music writing, or notation have come and gone.

In all of these notation systems, the object was, and still is, to find ways of giving musical sounds meaning to the eye by using signs or symbols which accurately represent those sounds.

From early Middle Eastern cultures such as Egyptian, Phoenician and Greek, came notation systems based on alphabets, but these systems were vague and of little use in becoming internationally understood. The system of notation which is in use today is called **Staff Notation**, and is derived from the early notational systems which were fostered and developed by the early Christian Church.

Staff Notation is the name given to the system of representing various sound by using characters called notes and other symbols and placing them on a series of lines and spaces, often referred to as the pitch ladder, thus visually indicating changes in duration and pitch.

Some reference has already been made regarding common terminology used in the language of music – Pitch, Duration, Quality, Volume etc. At a later stage terms like Rhythm, Tempo, Expression, Time, Phrase, Dynamic etc. will be explained.

This list of things to learn may at first seem daunting, however, it must be remembered that music is a kind of language, possibly the most truly international of all languages, and the rewards for those who have the patience to learn it, are beyond measure.

LESSON 5 - WORKSHEET

ORAL WORK

1. What is the main purpose of notation in music?
2. Name the system of notation which is used in modern music.
3. List the main musical features which the system of staff notation covers.
4. Describe how musical sound may be represented graphically.
5. Give a brief description of the origins of staff notation.

EXERCISES

1. Select from pages 1.19.1, 1.19.2 and 1.19.3 of this book, the fingering exercises and make a note of the layout and presentation of how the various notes appear on paper. This exercise illustrates the pitch differences on the pipe chanter and how they may be identified in written music.
2. Turn to the beginning of this book and the tune "The R.S.P.B.A Diamond Jubilee – 1990". Note the presentation and layout of the written music. This is an ideal example of Staff Notation illustrating a full pipe band score.

LESSON 6

STAFF NOTATION (PART 2)

PITCH

As the nature of musical sound and melody became clear to early musicians, the “**SCALE**” (from the Latin “SCALA”, meaning “LADDER”) became established. The Greek mathematician Pythagoras showed how notes of different pitch, but of a precise placing in a particular order, could be achieved by repeatedly shortening, or “stopping” a plucked string.

The notes are named after the first seven letters of the alphabet from **A to G**, and repeated as required.

A scale is a particular succession of alphabetically named musical sound or notes normally consisting of eight in number, so that beginning on ‘A’ (**e.g.** A; B; C; D; E; F; G; A), the first ‘A’, is called the ‘**TONIC**’ or keynote and the last note, also ‘A’ is called the ‘**OCTAVE**’ (from the Green ‘OKTO’ meaning eight).

Each step of a scale is called a ‘**DEGREE**’ and each degree is separated by an ‘**INTERVAL**’

The position of each note is given meaning to the eye by the use of a ladder-like arrangement of lines and spaces, and the notes take their pitch name, ‘A’ to ‘G’ from their position on the ladder.

This ladder is “**THE GREAT STAFF**”.

The **GREAT STAFF** is described as follows:-

It has eleven horizontal lines and ten intermediate spaces.

The Central Line is called ‘**MIDDLE C**’ but is not labelled as such when the Great Staff is used.

The note **MIDDLE C** is shown on a short line called a ‘**LEGER LINE**’. A Leger Line is a short additional line which can be added above or below a stave to extend its range. Only one, above the stave, to accommodate High ‘A’ on the chanter is required when writing music for the Great Highland Bagpipe.

1.6.2

STAFF NOTATION (PART 2) (CONT'D)

The Great Staff covers the full range or 'COMPASS' of the highest to lowest voices. The term 'VOICES' is used to describe instruments as well as human voices.

The voice ranges fall into roughly three groups.

Viz a viz:- **The highest or 'TREBLE'**
 The mid, or 'ALTO'
 The lowest, or 'BASS'

These are shown by using signs called 'CLEFS'.

The Great Staff is normally only used for instruments such as piano, organ or harp, which are capable of producing the full range of notes.

The Great Staff is divided into two short staves, the middle line is omitted.

Instruments which have a short compass use the 'SHORT STAFF' consisting of 5 lines and 4 spaces. The lines and spaces of both the Great Staff and the Short Staff are named from the lowest upwards.

LESSON 6

STAFF NOTATION (PART 2) (CONT'D)

THE GREAT STAFF

The Great Staff consists of five staves. The top staff is labeled "Treble, or G Clef" and contains notes G, A, B, C, D, E, F. The middle staff is labeled "Middle C" and contains notes G, A, B, C, D, E, F. The bottom staff is labeled "Bass, or F Clef" and contains notes G, A, B, C, D, E, F. The notes are arranged in a continuous sequence across the staves, with G being the lowest note and F the highest.

The Alto, or C clef is shown on a five-line staff. The clef is positioned on the third line, and the label "Alto, or C clef" is written below the staff.

Middle C

1.6.4

LESSON 6 - WORKSHEET

ORAL WORK

1. What is meant by the pitch of sound?
2. How are musical sounds named in the English Language
3. How many letters of the alphabet are used to denote musical sounds?
4. What is a scale in music?
5. Explain the term octave.
6. The word degree has a specific meaning with regard to musical scales, explain what this is.
7. What is the term used to denote the difference in pitch between two musical sounds?
8. In any musical scale, which note is the tonic or key note?
9. What is the name given to the ladder-like arrangement of lines and spaces on which notes are placed?
10. What is a clef, and why is it necessary?
11. How many clefs are there, name them and state the reason for their names?
12. What is a leger line and why is it used?
13. Explain the reason for only using the short staff in bagpipe music.
14. Name the notes capable of being played on the bagpipe chanter.

1.6.5

LESSON 6 – WORKSHEET (CONT'D)

EXERCISES

1. From the scale played on the practice chanter by your instructor or an experienced piper, identify the sound of the notes played by their alphabet names.
2. Identify by sound the notes on the practice chanter which are an octave apart and specify their alphabet names.
3. Draw the great staff and place the correct alphabet letter on each of the lines and spaces.
4. Draw a short staff and correctly position leger lines above and below.
5. Draw the great staff and position in their correct place the treble, alto and bass clefs.

LESSON 7

STAFF NOTATION (PART 3)

THE SHORT STAFF AND CLEFS

The Short Staff consists of 5 lines and 4 spaces and is used for voices that do not require the full Compass of the Great Staff.

All bagpipe music is written on a Short Staff.

All drum notation for bagpipe is written using a single line indicating indefinite pitch.

When the Short Staff is used a sign is placed at the beginning of the Staff which fixes the pitch of the music to be played in either TREBLE, ALTO or BASS range. In Pipe Band music, the Great Staff consists of two short staves, namely TREBLE and BASS.

This sign is called a "CLEF", a French word meaning KEY.

There are three types of Clefs, the Treble, or 'G' Clef, the Alto or 'C' Clef and the Bass or 'F' Clef.



The five lines above Middle 'C' on which bagpipe music is written is the treble part of the Great Staff. The "TREBLE" or 'G' Clef is said to be a distortion of an old letter 'G' and curls round the 'G' line on the staff.

1.7.2

THE SHORT STAFF AND CLEFS (CONT'D)



Based on Middle 'C', the 'C' clef is used for the intermediate range. More than one form of this sign exists although whichever is used it must indicate clearly Middle 'C'. This illustration shows Middle 'C' at the central point where the two curves meet.



The five lines below Middle 'C' is the bass part of the Great Staff and the line where the sign originates and curls round is the 'F' line. This is the group on which the Bass and Tenor Drum notations are written for Pipe Bands.

LESSON 7

STAFF NOTATION - THE COMPASS OF THE BAGPIPE

The pitch range, or compass, of the bagpipe and pitch range of the bass and tenor drums are shown on the Great Staff as depicted below.

Range of Chanter Scale

G A B C D E F G A

Leger Line

Middle C

Bass Drone Tenor Drone Bass Drum Tenor Drum

⊕

All tuned relative to
Low A on the Chanter

1.7.4

LESSON 7

MUSICAL SCORE AS USED IN PIPE BAND – FULL SCORES

A group of staves bracketed together, to be read by different musicians at the same time is called a Full Score.

BRACE

The diagram illustrates a musical score for a pipe band full score. It consists of four staves, each with a clef and a brace on the left side. The staves are labeled on the right as follows:

- Top staff: Treble clef, labeled **Bagpipe Score**
- Second staff: Treble clef, labeled **Snare Drum Score**
- Third staff: Bass clef, labeled **Tenor Drum Score**
- Bottom staff: Bass clef, labeled **Bass Drum Score**

This musical arrangement shows in order from the parts allotted to the various performers, as distinct from ‘parts’ which show only that of one performer.

In full scores for Pipe Bands, the uppermost staff carries the music for the pipes, the second staff the music for the snare drum, the third the music for the tenor drum and the fourth the music for the bass drum all bracketed together with a device called a **Brace**. Unity is indicated by the brace.

1.7.5

MUSICAL SCORE AS USED IN PIPE BAND – FULL SCORES (CONT'D)

Sometimes the bass and tenor scores are written on the one staff, this is merely a convenience.

Practice in memorising the positions and names of each note in the great staff will give the musician the ability to recognise and play any melody presented in written form.

This technique is called **SIGHT READING**.

1.7.6

LESSON 7 - WORKSHEET

ORAL WORK

1. What is the Short Staff and why is it used?
2. Name the three types of clef signs used in music and explain their significance.
3. Which of the clef signs are used to indicate the pitch range of the following :-
 - a) The bagpipe
 - b) The bass and tenor drums
4. List the notes which are capable of being played on the chanter of the Great Highland Bagpipe.
5. Which lines of the great staff form the following :-
 - a) The treble staff
 - b) The bass staff
 - c) The alto staff
6. What is a Full Score for pipe bands?
Explain its purpose.
In your answer indicate the number of instruments which you would expect it to embrace.
7. The Brace is a device which is used in musical notation, explain its function.

1.7.7

LESSON 7 – WORKSHEET (CONT'D)

EXERCISES

1. On the short staff draw in its correct position, the G Clef sign:
2. On the short staff draw in its correct position, the C Clef sign:
3. On the short staff draw in its correct position, the F Clef sign:
4. Listen to any recording of a pipe band and try and pick out the various instruments which are playing and imagine how the written music for each instrument would relate to each other.
5. Draw the great staff with the Treble and Bass Clef signs. Show the range of the pipe chanter scale and the pitch of the bass and tenor drones.

1.8.1

LESSON 8

STAFF NOTATION (PART 4)

DURATION - SOUNDS

Duration is the length of a musical sound, or in other words the period of time during which a musical sound is sustained or held. Notes are characters or symbols used to show the relative length or duration of a musical sound.

In Staff Notation six different note shapes are generally used to give the duration of a musical sound meaning to the eye.

These signs or symbols are as follows :-

THE SEMIBREVE



The Whole Note

(Consists of a white or hollow note head)

THE MINIM



The Half Note

(Consists of a white or hollow note head with a stem)

THE CROTCHET



The Quarter Note

(Consists of a black note head with a stem)

THE QUAVER



The Eighth Note

(Consists of a black note head with a stem and one tail)

1.8.2

LESSON 8

DURATION – SOUNDS (CONT'D)

THE SEMI-QUAVER



The Sixteenth Note

(Consists of a black note head with a stem and two tails)

THE DEMI-SEMI QUAVER



The Thirty Second Note

(Consists of a black note head with a stem and three tails)

1.8.3

LESSON 8

TABLE OF RELATIVE NOTE VALUES

THE SEMIBREVE
(Whole Note)



Is equal to

Two Minims
(Half note)



Or

Four Crotchets
(Quarter note)



Or

Eight Quavers
(Eighth Notes)



Or

Sixteen
Semiquavers
(Sixteenth Notes)



Or

Thirty-Two Demi-
Semi Quavers
(Thirty second note)



All basic notes are referred to as SIMPLE NOTES.

1.8.4

LESSON 8 - WORKSHEET

ORAL WORK

1. Explain the musical term "DURATION".
2. Explain the musical term "NOTES".
3. How many note shapes are in general use?
4. Name all of the notes in general use.
Describe their shapes.
5. Name the note referred to as a Quarter Note.
How many semi-quavers does it contain?
6. Describe and name an eighth note.
How many are in a semi-breve?
7. How many quavers are represented by a minim?
8. There are two demi-semi-quavers in a semi-quaver.
How many semi-quavers are in a crotchet?
9. Which note represents two crotchets?
10. A sixteenth note is a semi-quaver, what part of the Whole Note is a quaver?

1.8.5

LESSON 8 – WORKSHEET (CONT'D)

WRITTEN WORK

1. Write the Table of Relative Note Values.
2. Each of the following note groupings are equal in value to one note.

Draw its shape and write its name.

State its value in relation to the Whole Note.

e.g.  =  Crotchet – Quarter Note



3. Write all the permutations you can think of from one crotchet. Simple notes only.

1.9.1

LESSON 9

STAFF NOTATION (PART 5)

DURATION - RESTS

Six note shapes are used to show the length of musical sounds. Another six shapes called '**RESTS**' are used in music to show periods of silence.

Each note has its equivalent rest and both share the same note.

e.g. **Note - QUAVER**
 Rest - QUAVER REST

The subject of Rests, like Pitch, Duration etc., must be studied thoroughly in order that the learner may become familiar with their usage.

The six rest shapes are as follows :-

**THE SEMIBREVE
REST**



Equal in value to



**THE MINIM
REST**



Equal in value to



**THE CROTCHET
REST**



Equal in value to



**THE QUAVER
REST**



Equal in value to



**THE SEMI-QUAVER
REST**



Equal in value to



**THE DEMI-SEMI
QUAVER
REST**



Equal in value to



1.9.2

LESSON 9 - WORKSHEET

ORAL WORK

1. How many rest shapes are in general use?
2. What do rests show or represent?
3. Name all of the rest shapes in general use?
4. Name the rest representing a quarter note.
How many semi quaver rests would it represent?
5. Describe and name the rest with the value of an eighth note.
6. How many semi-quaver rests would be required to represent the value of a minim?
7. Two demi-semi-quaver rests would represent the same value as a semi-quaver, how many semi-quaver rests would be required to represent the value of a crotchet?
8. What part of the Whole note is a quaver rest?

1.9.3

LESSON 9 – WORKSHEET (CONT'D)

WRITTEN WORK

1. Write the table of relative note values by substituting rest signs for notes.
2. Starting with the shortest duration, write every note value in general use together with its corresponding rest.
3. For each of the following sub-divided groups :-

3.1 Show the rest symbol which is of equivalent duration.

3.2 Give its name.

3.3 State its value in relation to the whole note.

e.g. $\text{♪} \text{♪} = \text{⏏}$ Crotchet – Quarter rest

a) $\text{—} \text{—}$

k) ♪♪♪

b) —

l) ♪♪♪

c) $\text{♪} \text{♪♪}$

m) $\text{⏏} \text{♪} \text{♪♪}$

d) ♪♪

n) $\text{—} \text{⏏} \text{♪} \text{♪}$

e) $\text{⏏} \text{⏏}$

o) $\text{♪} \text{♪} \text{♪} \text{♪}$

f) $\text{⏏} \text{♪} \text{♪}$

p) ♪♪♪

g) $\text{♪} \text{♪♪}$

q) $\text{⏏} \text{♪} \text{♪}$

h) ♪♪♪♪

r) $\text{♪} \text{♪} \text{♪} \text{♪}$

i) $\text{♪} \text{♪} \text{♪}$

s) $\text{⏏} \text{—} \text{⏏}$

j) $\text{♪} \text{♪}$

t) $\text{⏏} \text{⏏} \text{⏏} \text{♪} \text{♪} \text{♪}$

1.10.1

LESSON 10

STAFF NOTATION (PART 6)

DURATION - LENGTHENING NOTES

The duration of notes may be increased by using the following :-

- (1) A Dot or Double Dots
- (2) The Tie or Bind
- (3) The Pause Sign

When using a Dot or Double Dot, or the Tie or Bind, the increase in length is precise, however, when the Pause sign is used, the increase in duration is at the discretion of the performer, the conductor or the pipe major.

DOTTING

A dot, when placed after a note, increases its value by half its original value

e.g.



In the case of a double dotted note (**i.e.** two dots), the second dot adds half of the value of the first dot.

e.g.



Thus, a dotted note's duration is $1 \frac{1}{2}$ times the value of the original note, also a double dotted note is $1 \frac{3}{4}$ times the value of the original note.

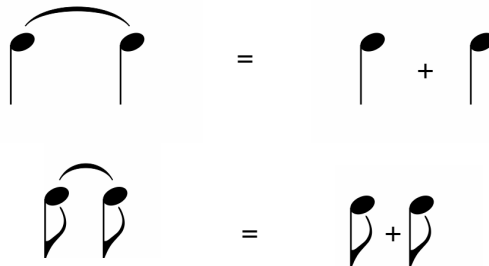
1.10.2

DOTTING (CONT'D)


TIE OR BIND

The Tie or Bind is a short curved line which is placed over two or more notes of the same pitch, the first note is sounded and held for the value of all the tied notes.

e.g.



PAUSE SIGN

The Pause Sign, known as the '**FERMATATA**' is a short arc enclosing a dot () and is placed over the note to be held. The sound is sustained at the performers or conductors discretion, therefore it has no exact duration.



1.10.3

LESSON 10 - WORKSHEET

ORAL WORK

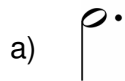
1. Name the common methods of lengthening or increasing the duration of notes.
2. State the effect on a notes duration when it is followed by :-
 - 2.1 a single dot.
 - 2.2 a double dot.
3. What note value would be represented by a dotted crotchet?
4. In a double dotted crotchet, what would be the value of the second dot?
5. What is the difference between the terms tie and bind.
6. Define tie or bind
7. If a crotchet is tied to another crotchet of the same pitch, what duration or note value would require to be sounded
8. If the same crotchet was tied to a quaver of the same pitch, what would be the value required to be sounded?
9. What musical term is used to describe a musical pause sign?
10. What duration does the pause sign represent?

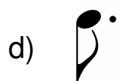
LESSON 10 – WORKSHEET (CONT'D)

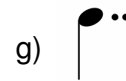
WRITTEN WORK

1. Write two or more notes and ties or binds to represent the value of the dotted or double dotted notes

e.g. 

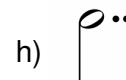
a) 

d) 

g) 

b) 

e) 

h) 

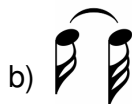
c) 

f) 

2. Write a single note that represents the value of the following :-

a) 

d) 

b) 

e) 

g) 


c) 

f) 

h) 

3. Each of the following note groupings are equal in value to one note. Draw its shape and write its name. State its value in relation to the Whole Note.

e.g.  - Crotchet – Quarter Note

a) 

d) 

g) 

b) 

e) 

h) 

c) 

f) 

LESSON 11**STAFF NOTATION (PART 7)****DURATION - LENGTHENING OF RESTS**

The duration of rests may be increased by using the following :-

- (1) A Dot or a Double Dot.
- (2) The Pause Sign.

N.B The Tie or Bind is never used on rests.

When using a Dot or Double Dot, the increase in length is precise, however, when the Pause Sign is used, the increase in duration is not a fixed quantity.

DOTTING

A Dot, when placed after a Rest increases its value by a half.

e.g. $\text{♪} \cdot = \text{♪} + \text{♪}$ $\text{♪} \cdot = \text{♪} + \text{♪}$

In the case of a Double Dotted Rest (**i.e.** two dots) the second dot adds half of the value of the first dot.

e.g. $\text{♪} \cdot \cdot = \text{♪} + \text{♪} + \text{♪}$ $\text{♪} \cdot \cdot = \text{♪} + \text{♪} + \text{♪}$


Original Rest + First Dot + Second Dot

This means that a dotted rest is 1 ½ times the value of that rest and a double dotted rest is 1 ¾ times the value.

1.11.2

DOTTING (CONT'D)

PAUSE SIGN

The Pause Sign is described in Lesson 10 is a short arc enclosing a dot () and is placed over the Rest to be held or lengthened.

It is used to prolong the period of silence at the performers or conductors discretion and has no exact duration.

1.11.3

LESSON 11 – WORKSHEET

ORAL WORK

1. Can rests be lengthened?
2. Describe how they can be lengthened.
3. Why can you not use a tie or bind?
4. Is the lengthening of musical rests by using dots precise?
5. Is the lengthening of musical rests by using the fermata precise?
6. Describe the differences between a rest and a dotted rest.
What does two dots placed after a rest mean?
7. In a double dotted quaver rest what would be the value of the second dot?
8. What period of silence would a dotted minim rest represent?
9. What part of the Whole Note would be represented by the dot following a quaver rest?

1.11.4

LESSON 11 – WORKSHEET (CONT'D)

WRITTEN WORK

1. Write down 2 or more rests to represent the value of the dotted or double dotted rests.

e.g. $\text{♩}^\cdot = \text{♩} + \text{♪}$

a) ♩^\cdot

d) ♪^\cdot

g) $\text{♩}^{\cdot\cdot}$

b) ♪^\cdot

e) $\text{♪}^{\cdot\cdot}$

h) $\text{♩}^{\cdot\cdot}$

c) ♩^\cdot

f) $\text{♩}^{\cdot\cdot}$

2. Write down a single rest that represents the value of the following :-

a) $\text{♩} + \text{♪} + \text{♪}$

d) $\text{♩} + \text{♩} + \text{♩}$

g) $\text{♪} + \text{♪} + \text{♪}$

b) $\text{♩} + \text{♩} + \text{♪}$

e) $\text{♪} + \text{♪} + \text{♪}$

h) $\text{♩} + \text{♩}$

c) $\text{♪} + \text{♪} + \text{♪}$

f) $\text{♩} + \text{♩}$

3. Write down notes to the value of the following rest signs.

e.g. $\text{♩} = \text{♩}$

a) ♪^\cdot

d) ♩^\cdot

g) $\text{♩}^{\cdot\cdot}$

b) ♩

e) ♪^\cdot

h) $\text{♩}^{\cdot\cdot}$

c) $\text{♪}^{\cdot\cdot}$

f) ♩^\cdot

1.12.1

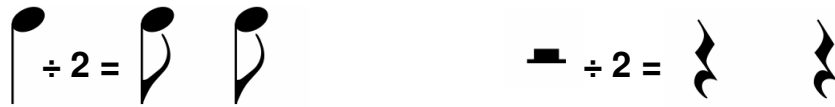
LESSON 12

STAFF NOTATION (PART 8)

DURATION - UNDERSTANDING SIMPLE AND COMPOUND VALUES

SIMPLE notes or rests are those which can be divided into two notes of equal value.

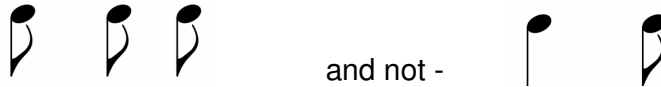
e.g.



COMPOUND notes or rests are dotted and are able to be divided into three notes of equal value.



Compound notes should always be considered as three equal parts:



as this will assist in understanding later lessons on the means of measuring the different rhythms in music.

1.12.2

LESSON 12 - WORKSHEET

ORAL WORK

1. What is a simple note?
2. What is a compound note?
3. Are the following notes simple or compound?



1.13.1

LESSON 13

STAFF NOTATION (PART 9)

RHYTHM; KINDS OF TIME; BARLINES AND BARS

Most music played has a natural and definite pattern of beats or pulses running through it forming a basic rhythm. Rhythm is the regular recurrence of the strong and weak accents arising from the division of the music into regular metrical portions. These rhythmical patterns generally fall into three groups :-

1. The 2 pulse pattern is called “**DUPLE TIME**”
2. The 3 pulse pattern is called “**TRIPLE TIME**”
3. The 4 pulse pattern is called “**QUADRUPLE TIME**”

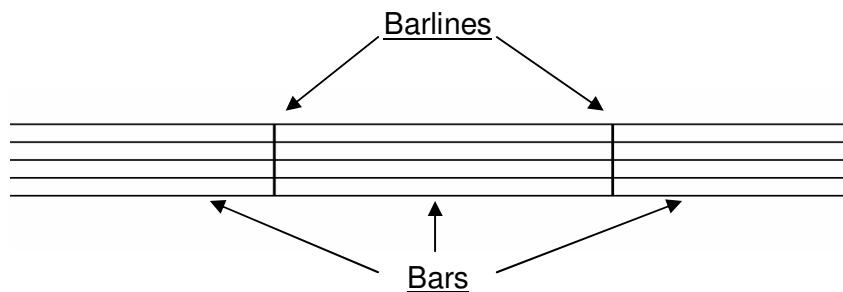
They are known collectively as the “**KINDS OF TIME**”.

Each pattern of natural pulses begins with a strong pulse.

e.g. Duple time has a pattern of Strong – Weak
Triple time has a pattern of Strong – Weak – Weak
Quadruple time has a pattern of Strong – Weak – Medium - Weak

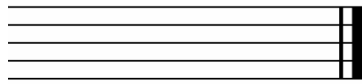
BARLINES are straight vertical lines positioned on the staff and show the location of the natural strong pulses. This natural strong pulse is normally positioned immediately after the Bar Line.

BARS are the measured contents between barlines. A bar is normally subdivided into two, three or four beats or pulses which are measured into units of time called beat notes.

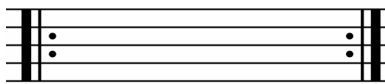


1.13.2

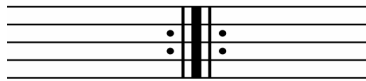
BARLINES & BARS (CONT'D)



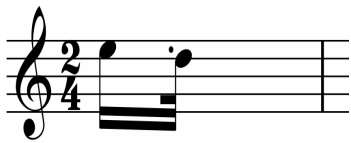
DOUBLE BAR LINES are placed at the end of a section or at the completion of a musical piece.



REPEAT MARKS are placed at both the beginning and ending of a section of the music which is to be repeated

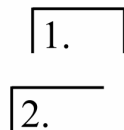


COMBINED DOUBLE BARLINE AND REPEAT MARK.



INCOMPLETE BARS often occur in music. They are usually positioned at the beginning of the piece and contain one or more notes which introduce the music. These unstressed notes are called the ANACRUSIS. Another incomplete bar will occur at the end of the piece, which when added to the ANACRUSIS has a value equal to a complete bar.

In a repeated section,
first time and



is placed over the music to be played only in the
indicates what must be played on the repeat.

1.13.3

LESSON 13 - WORKSHEET

ORAL WORK

1. How many kinds of time are there?
2. Give the pulse pattern for triple time.
3. Give the pulse pattern for simple duple time.
4. If a pulse pattern was STRONG-WEAK-MEDIUM-WEAK, what kind of time would it be?
5. What is a bar line?
6. What is its purpose?
7. What is meant by the strong pulse?
8. Where is the strong pulse normally located?
9. What is a bar?
10. Are all bars of equal length?
11. How is each bar divided?
12. Do all pieces of music have the same number of beat notes in a bar?
13. What is the significance of double bar lines?
14. What is a repeat sign?
15. Why are double bar lines used?
16. What do you understand by the devices illustrated below?

1.

2.

1.14.1

LESSON 14

STAFF NOTATION (PART 10)

SIMPLE AND COMPOUND TIME; SUBDIVISION OF BEAT NOTES

Bars normally contain groups of two, three or four natural pulses or beats. Pulses and Beats have the same meaning when used in the context of rhythm, however, the term Beat Note is used in connection with time measurement.

Each bar therefore may contain two, three or four beat notes. Each beat note in a bar is of equal value and may be either simple or compound.

e.g. Duple time consists of two 'Simple' beat notes or two dotted 'Compound' beat note per bar

When a bar of music contains simple beat notes, the music is in **Simple Time**.

1. SIMPLE DUPE TIME – Two simple beat notes per bar.



2. SIMPLE TRIPE TIME – Three simple beat notes per bar.



3. SIMPLE QUADRUPE TIME – Four simple beat notes per bar.



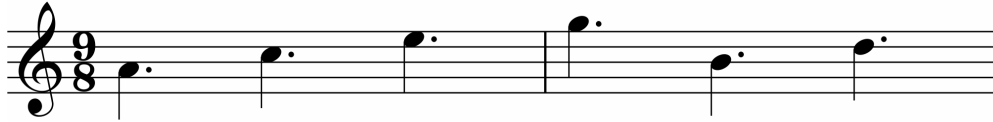
When a bar of music contains compound beat notes, the music is in **Compound Time**.

1. COMPOUND DUPE TIME - Two compound beat notes per bar.

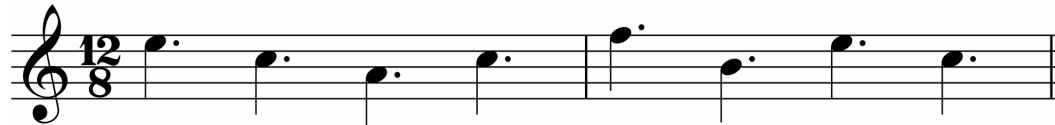


1.14.2

2. COMPOUND TRIPE TIME – Three compound beat notes per bar.



3. COMPOUND QUADRUPLE TIME – Four compound beat notes per bar.

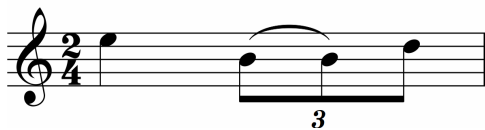


Usually in pipe band music, the tunes have a regular rhythm and each tune is generally written in one time signature.

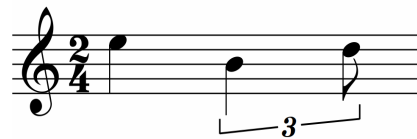
In some other form of music, the time signature may change every few bars, at the discretion of the composer.

When writing irregular groups for pipe bands, the normal rules on good grouping are observed.

e.g.



NOT



SUBDIVISION OF BEAT NOTES

A beat note may be subdivided in various ways, therefore a full knowledge of subdivided notes may be acquired only through a complete understanding of the table of relative note values.

When a beat note is subdivided, these parts must add up to the full beat note value.

A subdivided beat note may incorporate the use of rests.

It is good musical practice that each subdivided beat note be clearly grouped within the bar so that the musician can readily see whether there are two, three or four beat notes to the bar.

It is the method of subdividing beat notes which contributes greatly to the rhythm of the piece and every musician should have a mental picture of the note groups of each rhythm.

1.14.3

LESSON 14 - WORKSHEET

ORAL WORK

1. How is the time of each bar shown?
2. What does a time sign look like? Give examples.
3. Is each beat note in a bar of equal value?
4. Is each beat note always a simple note?
5. How many beat notes are there in simple duple time?
6. How many beat notes are there in compound duple time?
7. What kind of time is it when the beat notes are simple?
8. In simple time, what kind of beat notes would you expect to see?
9. Can a beat note be sub-divided?
10. How many "kinds of time" are there? Give two examples.
11. How many beat notes are there in simple quadruple time?
12. How many beat notes are there in compound triple time?
13. What is the division of duple time?
14. When a beat note is sub-divided, what must it equal?
15. What is the division of triple time?
16. What is the division of quadruple time?
17. How many beat notes are there in simple triple time?
18. How many beat notes are there in compound quadruple time?
19. When you sub-divide a beat note, can you use rests?
20. Why is the grouping of the sub-divided beat note important?

1.15.1

LESSON 15

STAFF NOTATION (PART 11)

TIME SIGNATURES

The various 'kinds of time' are expressed by the use of symbols or two figures placed one above the other on the staff.

This sign is called the **Time Signature** and is placed immediately after the clef sign at the beginning of a piece of music.

SIMPLE TIME

Where a simple note is a beat note, the upper figure gives the number of beats in the bar, and the lower represents the type of note which is used as a beat, in terms of a fraction of the semibreve. Half-note, quarter-note etc.

DUPLE		
TRIPLE		
QUADRUPLE		

In all the above examples, each beat may be normally divided into two or four parts.

e.g.



The diagram shows two half notes on a staff, followed by an equals sign, and then four quarter notes on a staff, illustrating that two half notes are equivalent to four quarter notes.

When this is the case, the time is said to be **Simple** as the beat notes are simple notes.

1.15.2

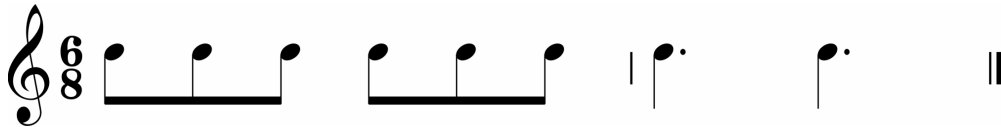
COMPOUND TIME

Although they are defined differently, compound time signatures are shown in the same way as simple time signatures.

Compound time is time in which the beat note or pulse note is dotted. Dotted notes can only be divided, or equalled by, three notes of equal lesser value.


In the example below there are two beatnotes, each divided into three parts, so that the top figure is $2 \times 3 = 6$, showing six divisions, while the lower figure shows the value of each division, which is a quaver, therefore the lower figure is 8.

Thus the time signature is $\frac{6}{8}$



It is important to remember that there are not six beat notes in the bar, but two dotted crotchet beat notes, each divisible into three equal parts. **i.e.** Compound Duple Time.

N.B.

In $\frac{2}{4}$, $\frac{3}{4}$, $\frac{4}{4}$ a  is a beat and a half, but in Compound Time it is one beat.


The following page will illustrate the method of constructing Simple and Compound Time Signatures

All other time signatures are similarly constructed although more unusual time signatures sometimes occur.

When the letter C is given as the time signature, it means that the time is $\frac{4}{4}$, and is often referred to as Common Time. When the C has a stroke through it thus, C it is equal to $\frac{2}{2}$ time and is sometimes referred to as Cut Common Time or Alla Breve Time.

1.15.3

DUPLE TIME IN CROTCHETS (SIMPLE)

Two beat notes in a bar, therefore the top figure will be 2. Each beat is shown by a , therefore the lower figure will be 4, hence the time signature will be $\frac{2}{4}$


Two beat notes in each bar



Each is a Simple or Undotted note

Therefore the top figure will be $2 \times 1 =$



Each pulse is shown by a 
(quarter note)


Therefore the lower figure will be



Hence the Time signature is



DUPLE TIME IN DOTTED CROTCHETS (COMPOUND)

Two beat notes in a bar, but each is divided into three pulses, therefore the top figure will be $2 \times 3 = 6$. Each pulse will be shown by a , therefore the lower figure will be 8, hence the time signature will be $\frac{6}{8}$

Two beat notes in each bar




But each may be divided into three pulses

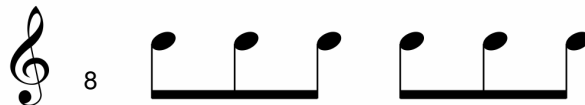


Therefore the top figure will be $2 \times 3 =$



Each pulse is shown by a 
(1/8 note)

Therefore the lower figure will be



Hence the time signature is



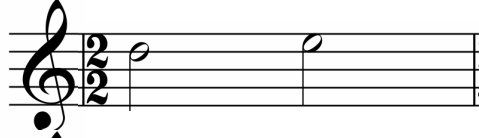
1.15.4

TIME SIGNATURE - EXAMPLES

SIMPLE TIME

Value per beat

SIMPLE DUPLÉ



2 or $\text{C} = 2$ per bar



2 = 2 per bar



2 = 2 per bar

Value per beat

SIMPLE TRIPLE



3 = 3 per bar



3 = 3 per bar



3 = 3 per bar

Value per beat

SIMPLE QUADRUPLE



4 = 4 per bar



4 or $\text{C} = 4$ per bar



4 = 4 per bar

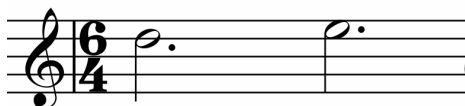
1.15.5

COMPOUND TIME

Value per beat



COMPOUND DUPL



6
4

= 2 per bar



6
8

= 2 per bar



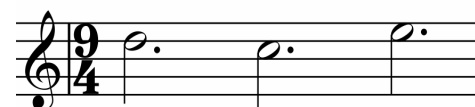
6
16

= 2 per bar

Value per beat



COMPOUND TRIPLE



9
4

= 3 per bar



9
8

= 3 per bar



9
16

= 3 per bar

Value per beat



COMPOUND QUADRUPLE



12
4

= 4 per bar



12
8

= 4 per bar



12
16

= 4 per bar

1.15.6
LESSON 15 – WORKSHEET

ORAL WORK

1. How is the time of each bar shown?
2. What do time signs look like? Give three examples.
3. Where is the time signature placed?
4. What does the upper figure indicate?
5. What would the time sign $\frac{2}{4}$ mean?
6. What does the lower figure indicate?
7. What is a compound beat note?
8. Give another name for the $\frac{4}{4}$ time.
9. What is the time sign for alla breve time?
10. Explain 'C' when given as a time sign?
11. Explain the following time signs :-
 - a) $\frac{3}{8}$
 - b) $\frac{4}{4}$
 - c) $\frac{3}{4}$
 - d) $\frac{2}{2}$

1.15.7

LESSON 15 – WORKSHEET (CONT'D)

WRITTEN WORK

1. Write two bars of simple duple time.
2. Write two bars of compound triple time.
3. Write two bars of compound duple time.
4. Write two bars of simple triple time.
5. Write two bars of compound duple time.


1.16.1
LESSON 16

STAFF NOTATION

TEMPO; VOLUME AND EXPRESSION

TEMPO

Tempo is the speed at which a piece of music is played and is shown in various ways on the staff.

- e.g.
- a) **ALLEGRO** = **(Fast)**
 - b) **LENTO** = **(Slow)**
 - c)  = **120** **(quavers per minute)**

However, in all music, tempo is not strict in the sense that not all slow marches, quick marches or dance tunes of the same type are played at the same speed. Much depends on the character of the piece and the opinion or interpretation of the performer.

VOLUME

Volume is the loudness or softness (degree of amplitude) of the music being played. The varying degrees of intensity known as Dynamics are shown on the staff and include the use of the following



Crescendo
(Gradually Louder)



Diminuendo
(Gradually softer)



Accents
(for stressed or emphasised individual notes)

In pipe band work, the first and second time respectively of a part, or maybe the first half of, and the second half of a part, depending on the construction of the piece are referred to as the **PIANO (P)** and **DOUBLE FORTE (FF)** passages.

1.16.2

EXPRESSION

Expression marks give instruction to the performer.

E.g.	conspirito	-	with spirit
	vivace	-	lively
	grazioso	-	gracefully
	dolce	-	sweetly

In pipe music, such directions do not usually exist, however, the nature or intention of a piece of music may be given in the title.

e.g

- | | | | | | |
|-----------|-----------------------|---|----------|---|-----------|
| 1. | Sine Bhan (Fair Jean) | - | Slow Air | - | Love Song |
| 2. | Sleep Dearie Sleep | - | Slow Air | - | Lullaby |

Sine Bhan implies the emotion of a man's love for a woman whereas Sleep Dearie Sleep implies a lullaby, or even the death of a loved one. These two examples convey entirely different feelings which may be highlighted by the performer. This is possibly the most difficult aspect of playing music. The musician has to use the imagination to try and understand the emotional content of the composer's intention, without possibly the personal experience of such an emotion, then communicate that feeling to the listener.

More information on expression marks in staff notation will be covered in lessons at a later stage.

1.16.3

LESSON 16 - WORKSHEET

ORAL WORK

1. Define tempo.
2. Give three examples of how tempo may be indicated on the staff
3. If there was no indication of tempo on the staff, how would you decide how fast to play?
4. How would you describe volume?
5. What single word would describe the varying degrees of sound intensity?
6. In pipe band work, the second time through the part is usually referred to as the double forte (FF).

How would you describe the first time through?
7. How would you indicate on the staff that a particular note is required to be emphasised or stressed?
8. Vivace, grazioso and dolce are all marks of what?

1.16.4

LESSON 16 – WORKSHEET (CONT'D)

WRITTEN WORK

1. Show the signs or symbols which would indicate that a tune should be played at 90 crotchets in each minute.

2. Show the signs or symbols which would indicate that a phrase should be played diminuendo.

What is meant by this?

3. What word means the opposite of diminuendo?

Draw it!

4. Write any four notes showing two different accents.

What does the accent indicate?

1.17.1
LESSON 17

STAFF NOTATION (PART 13)

EMBELLISHMENTS/ORNAMENTS/GRACENOTES

Embellishments, Ornaments or Gracenotes are short notes which are played in addition to the melody or theme notes and are used to adorn the music.

Embellishments are used to emphasise certain notes or rhythms, **i.e.** to stress the strong pulse; to highlight a particular rhythm.

Complex, or too many embellishments often tend to disrupt the basic rhythmic flow.

“Showmanship” should not take over from “Musicianship”. The embellishing of melodies has evolved over many centuries and may have begun with the “Trill”, **i.e.** alternating between two notes in rapid succession.

Gracenotes are shown with their stems upward and are written physically smaller than the notes that form the melody. In drumming they are usually referred to as Embellishments however, in piping and drumming, they do not count when barring-off for timing purposes.

e.g.

The image shows two lines of musical notation on a five-line staff. The first line is labeled 'Single Gracenotes' and 'Birl'. It contains five measures of music. The first measure is labeled 'D Throw' and shows a quarter note with a smaller eighth note (gracenote) on top. The second measure is labeled 'Doubling' and shows a quarter note with a smaller eighth note (gracenote) on top. The third measure is labeled 'Birl' and shows a quarter note with a smaller eighth note (gracenote) on top. The fourth measure is labeled 'Doubling' and shows a quarter note with a smaller eighth note (gracenote) on top. The fifth measure is labeled 'Birl' and shows a quarter note with a smaller eighth note (gracenote) on top. The second line of notation shows three measures. The first measure is labeled 'Flam' and shows a quarter note with a smaller eighth note (gracenote) on top. The second measure is labeled 'Drag' and shows a quarter note with a smaller eighth note (gracenote) on top. The third measure is labeled '4 Stroke Rough/Ruff' and shows a quarter note with a smaller eighth note (gracenote) on top, followed by a greater-than sign (>) above the note.

1.17.2

LESSON 17 WORKSHEET

ORAL WORK

1. Define embellishments, ornaments or Gracenotes.
2. What is the main purpose of ornaments or Gracenotes?
3. Is there any particular way of writing Gracenotes?
4. What is the general term used to describe Gracenotes in drumming?
5. What actual note value do Gracenotes and embellishments assume when barring off for timing purposes?

WRITTEN WORK

On a blank staff complete the following :-

1. Write a single note preceded by a single Gracenote.
2. Write four equally spaced notes, each preceded by two Gracenotes.

1.18.1

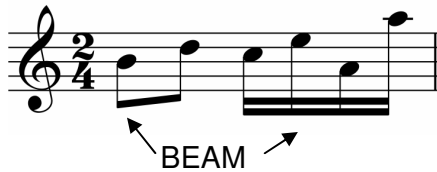
LESSON 18

WRITING MUSIC (PART 1)

Music is as much a way of communicating as speech, therefore each musician not only has to learn how to play music, but must learn how to read and write staff notation so that it can be understood by anyone who has the wish, or task, of playing the piece.

Basic rules in writing staff notation would be :-

1. The note heads must be clearly on a line or space.
2. Stems and tails should be easily distinguishable.
3. In Pipe Band music, all sub-divided beat notes should be grouped by a line or lines called **Beams** to show that they are obviously part of that beat note.



4. All tails or beams must be written (as far as bagpipe music is concerned) below the lowest line of the staff (first line).
5. Gracenotes must clearly indicate which note they adorn by their relative position

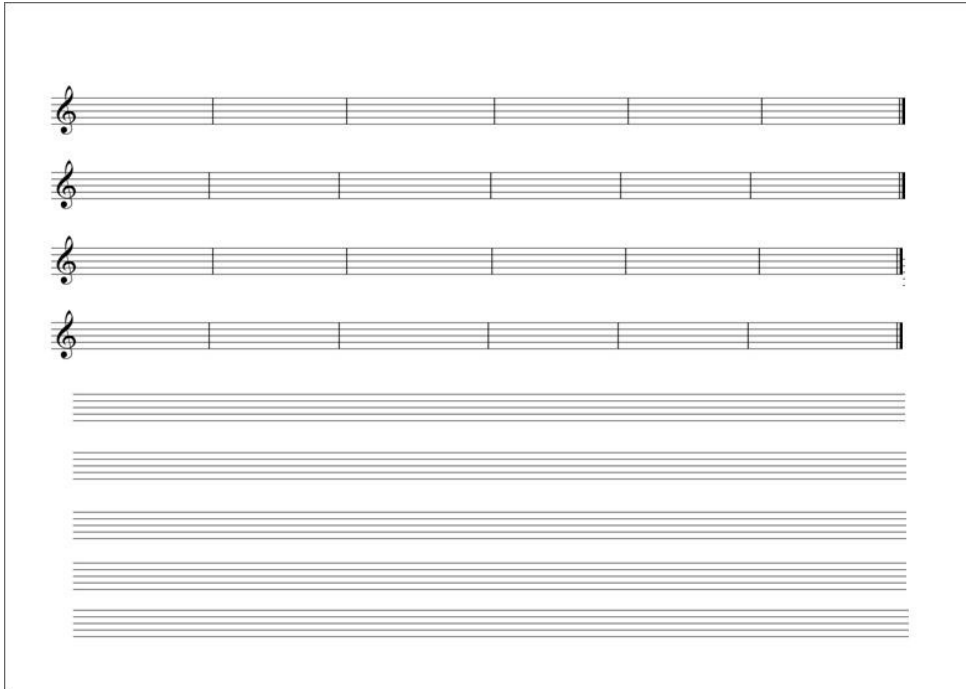


The presentation and layout of staff notation requires careful planning and diligent practice. In writing music it is important that a uniform layout depends on a number of features.

1.18.2

1. The musical content.
2. The physical dimensions of the material being written upon.

Acceptable formats would be as follows :-



These two diagrams have been reduced in size from A4

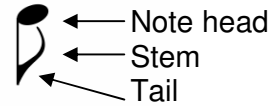
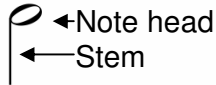
The above figure (in “landscape” format) is ideally suited for an eight bar mark-off per stave, whereas the figure to the left (in “portrait” format) is better adapted to four bars per stave.



1.18.3

WRITING MUSIC (PART 2)

NOTE COMPONENTS – EXAMPLES

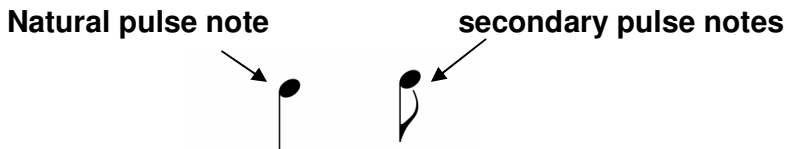
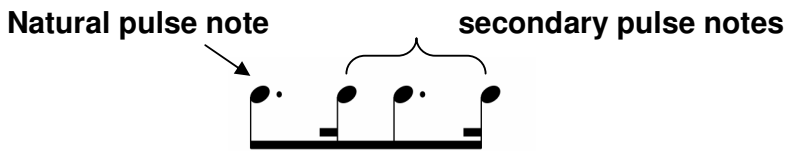
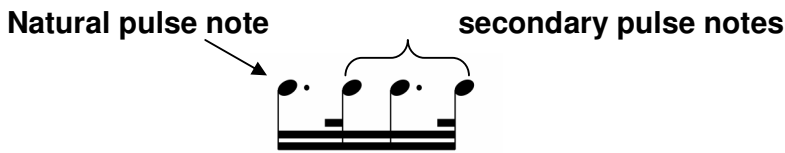


**Semibreve
(Whole Note)**

**Minim
(Half Note)**

**Quaver
(Eighth Note)**

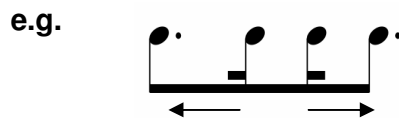
When a beat note is sub-divided, it forms a note group. The first note is called the **natural pulse** and the remaining notes **secondary pulses**.



Beams are used to group notes of the same beat. Where this is not possible, as in the last example, or in drumming where rests are included, the notes should be positioned so that it is clear to the performer that they do form a definite beat note group.



When a group of notes within a single beat note contain adjacent dotted and cut notes, then the direction of the cut should indicate the balanced sub-division of the beat note.



All of the foregoing are basic rules for good grouping but there are agreed exceptions that will be discussed at a more advanced stage.

1.18.5

WRITING MUSIC (PART 3)

When writing staff notation, each bar should be visualised as being in two, three or four sections. This helps towards placing the natural pulse notes (the first note in a subdivided beat note) in their proper place in relation to each other.

DUPLE TIME

A musical staff in treble clef divided into four measures. Below the staff, eight upward-pointing arrows indicate pulse positions. The first arrow is labeled 'S' and the second 'W'. This sequence repeats for the remaining three measures: 'S W', 'S W', and 'S W'.

TRIPLE TIME

A musical staff in treble clef divided into four measures. Below the staff, twelve upward-pointing arrows indicate pulse positions. The sequence of labels is 'S W W' for the first measure, 'S W W' for the second, 'S W W' for the third, and 'S W W' for the fourth.

QUADRUPLE TIME

A musical staff in treble clef divided into four measures. Below the staff, sixteen upward-pointing arrows indicate pulse positions. The sequence of labels is 'S W M W' for the first measure, 'S W M W' for the second, 'S W M W' for the third, and 'S W M W' for the fourth.

In the next set of examples, notes and stems take the place of the above rhythmic recurrences and the note heads (melody notes only) lie to the right, along with any tails of single notes or dots in dotted notes.

SIMPLE DUPL

A musical staff in treble clef with a 2/4 time signature. It contains four measures of music. The notes are: quarter, dotted quarter, eighth, eighth, quarter, quarter, dotted quarter, eighth, eighth, quarter, quarter, dotted quarter, eighth, eighth, quarter, quarter.

COMPOUND TRIPLE

A musical staff in treble clef with a 3/8 time signature. It contains four measures of music. The notes are: dotted quarter, eighth, eighth, quarter, quarter, dotted quarter, eighth, eighth, quarter, quarter, dotted quarter, eighth, eighth, quarter, quarter, dotted quarter, eighth, eighth, quarter, quarter.

1.18.6

WRITING MUSIC (PART 3) (CONT'D)

SIMPLE QUADRUPLE



The above principle of spacing and grouping becomes even more important when complicated note groups and Gracenotes are introduced.



(Note that Gracenotes are smaller with stems pointing upwards).

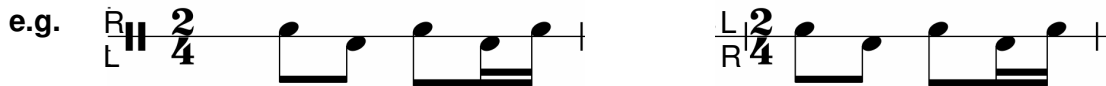
1.18.7

WRITING MUSIC (PART 4)

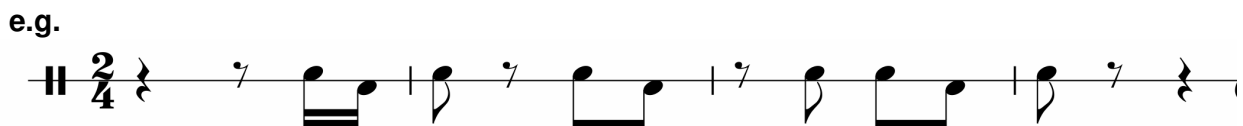
As indicated in the previous examples, the beams of each note group are shown quite clearly below the staff and above the staff for gracing. Should it be necessary to place beams on the staff, it is recommended that they be written at an angle to the staff lines, so that the group and note values can be clearly seen.

The musician should practice copying staff notation to become competent at reading and writing music.

Pipe Band drummers have a different layout of notation using one staff line. The position of the note above or below the line indicates the hand to be used.



All that has been said about good grouping and clear notation applies equally to rests and these also should be shown with care and clarity.



When a full musical score is written for a Pipe Band or any instrumental group, it shows each instruments relationship to the others.

e.g. FULL MUSICAL SCORE

1.18.8

WRITING MUSIC (PART 4) (CONT'D)

The 79's Farewell to Gibraltar

The image displays a musical score for 'The 79's Farewell to Gibraltar'. It consists of three staves. The top staff is a single melodic line in 2/4 time, featuring a sequence of eighth and sixteenth notes. The bottom two staves are a piano accompaniment, also in 2/4 time, with a bass clef. The accompaniment features a steady eighth-note bass line and chords in the right hand, including a prominent chord with a sharp sign (F#) in the second measure. The score concludes with a double bar line.

In the above example of 'Full Musical Score' writing, it may be observed that for each instrument, the beat notes are vertically in line with each other.

Each player can see when and what to play and the composer, arranger or conductor is able to observe the individual lines of each instrument creating or painting a total musical picture.

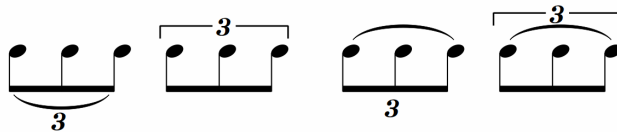
1.18.9

WRITING MUSIC (PART 5)

IRREGULAR GROUPS

Previously it was shown that the normal procedure for dividing a beat note in simple time is into halves and quarters, and in compound time into thirds and sixths. However, different ways of dividing a beat note are sometimes required. In simple time we may have thirds, fifths, sevenths, ninths etc. For these cases (called **Irregular Groups**), a special method of writing is used which does not necessitate new kind of notes, but uses the existing ones for fresh purposes.

e.g. If it is desired to divide a crotchet into three parts (thirds), the notes are written as quavers and the figure 3 added to indicate that their value is different from normal.



N.B Slur gives clarity

DEFINITION

An irregular group is the division of a beat note or portion of a beat note into a greater or lesser number of parts than normal.

Groups may consist of notes and rests combined.

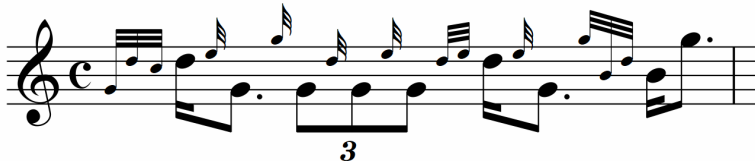
DUPLET Two notes played in the time of three of the same kind is an example of a simple group which is played in compound time.



1.18.10

WRITING MUSIC (PART 5) (CONT'D)

TRIPLET Three notes played in the time of two of the same type is an example of a compound group which is played in simple time



There are many other examples of irregular groups but these will be covered in a later lesson.

1.18.11

LESSON 18 WORKSHEET

ORAL WORK

1. What is the main purpose of staff notation?
2. Describe the points to observe when writing the following :-
 - a) Note Heads
 - b) Stems and tails
 - c) Subdivided beat notes
 - d) Position of tails and beams relative to the lines of the staff
 - e) Position of Gracenotes and embellishments
 - f) Adjacent dotted and cut notes within a single beat note
3. What are the natural pulses and rhythmic recurrences in the following :-
 - a) Duple time
 - b) Triple time
 - c) Quadruple time
4. Define irregular groups.
5. Describe a duplet.
6. Describe a triplet

1.18.12

LESSON 18 – WORKSHEET (CONT'D)

WRITTEN WORK

1. Draw a single quaver note and indicate the name given to each of its component parts.

2. Write four bars showing the natural pulses and rhythmic recurrences in each of the following times :-
 - a) Duple
 - b) Triple
 - c) Quadruple

3. Copy accurately **all** of the full score printed on page 69.

4. Practice writing by copying piping and drumming scores from printed staff notation until competency in accuracy and neatness is established.

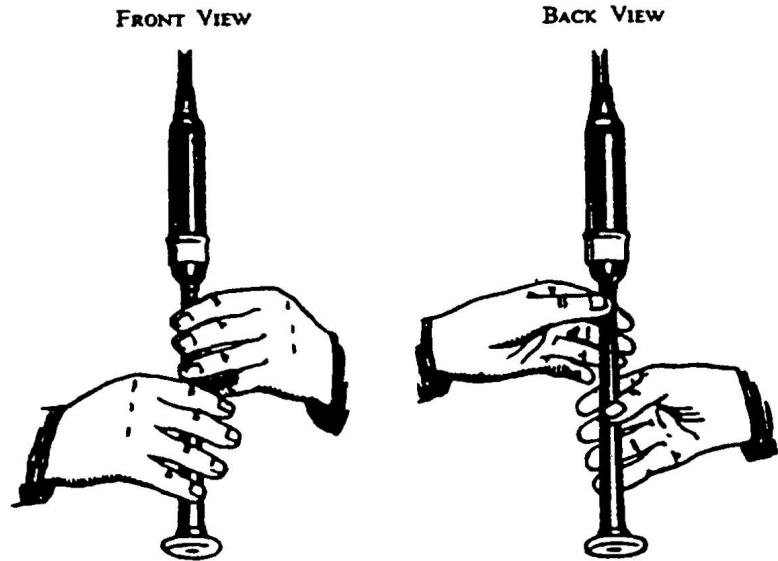
1.19.1

THE GREAT HIGHLAND BAGPIPE TUTOR

HOLDING THE CHANTER AND NAMING THE FINGERS

On the Great Highland Bagpipe each finger hole is named. Starting from the lower end of the chanter they are; Low A, B, C, D, E, F, High G and High A respectively.

Place the fingers on the chanter (starting from the bottom) as shown in the illustrations, when the holes are covered correctly and the chanter sounded, Low G will be heard. When this can be done with reasonable assurance proceed to learn the scale as instructed in the next section under the heading "The Fingering"



MOVEMENTS DEMANDING VERY SPECIAL ATTENTION

UPWARD - B to C, D to E, and High G to High A.

DOWN - High A to High G, E to D and C to B.

All of these movements involve lifting one or more fingers while replacing others and the greatest care should be taken to ensure that the up going ones pass the down coming ones off the chanter, otherwise slurring occurs and this a very serious fault.

THE FINGERING

To learn to finger the chanter and to play the scale, the directions above and below the diagrams on the next to pages should be following carefully.

i.e.

1. **Upward Movements**

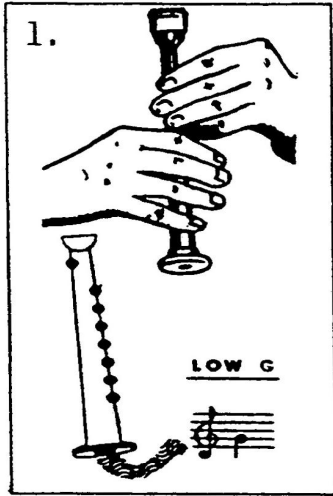
- read the instructions above the diagrams in the sequence 1 to 9.

2. **Downward Movements**

- read the instructions below the diagrams in the sequence 9 to 1.

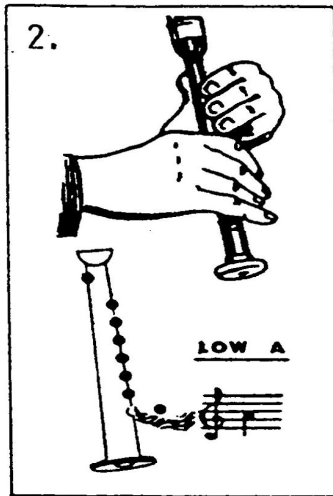
1.19.2

To sound Low "G" all the holes must be covered

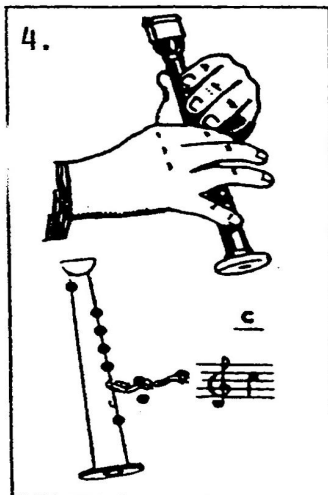


To return to Low G put down the Low A finger only

To sound Low "A" lift the Low "A" finger only

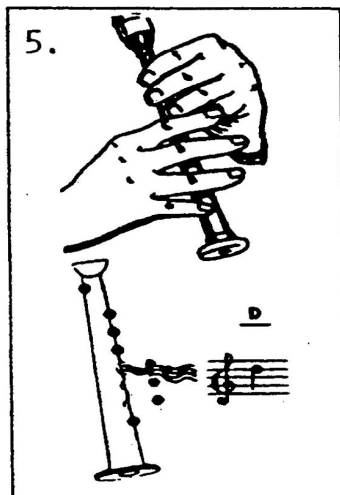


To make C put down the low A finger while lifting the C one.



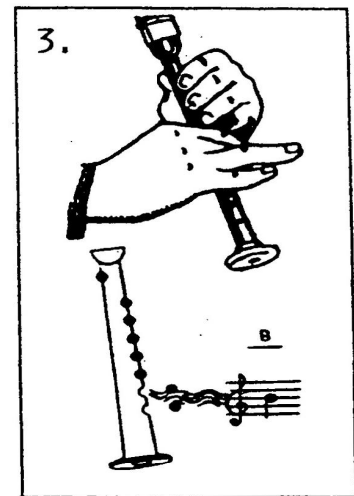
To return to C put down the D finger only

To make D lift the D finger only



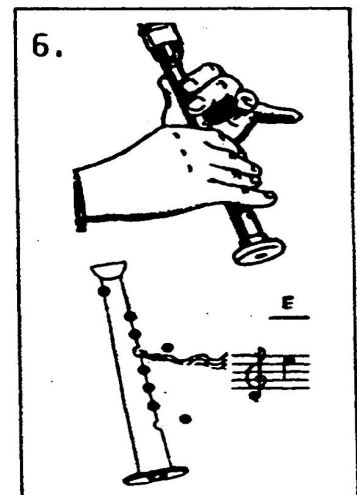
To return to D put down the E finger, lift of D, C and B as one, and replace the Low A one – all in one movement. Fingers passing each other off the chanter

To sound "B" lift the "B" finger only



To return to "B" put down the "C" finger and at the same time lift off the Low "A" one. The fingers passing each other off the chanter

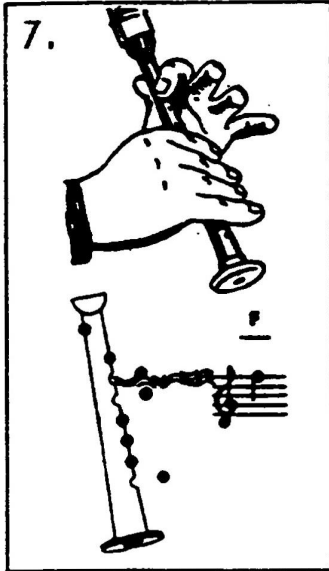
To sound E lift E finger off and at the same time replace B, C and D fingers in one movement. The fingers passing each other off the chanter.



To come to E put down the E finger only.

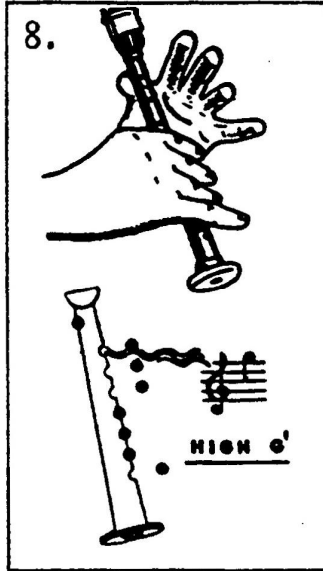
1.19.3

To sound F lift off the F finger only.



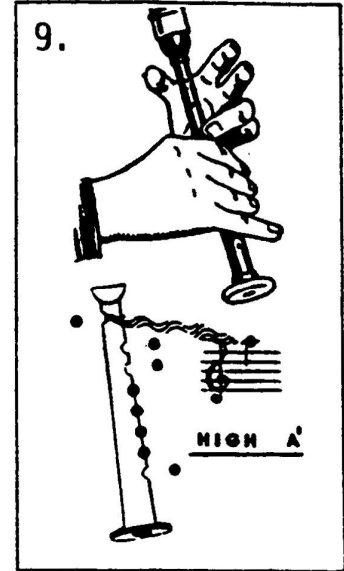
To return to F put down the High G finger only.

To sound High G lift the High G finger only.



To come back to High G replace the High A one, and lift the E one while doing so

To Sound High A lift the High A finger and replace E while doing so. Fingers passing each other off the chanter.



UP AND DOWN THE SCALE



Preliminary exercises for right hand and left hand changing.

Right hand



Left Hand



Hand Changing



The above exercises should be practiced separately and when they can be played fluently, should be combined to form a pleasing melody.

1.19.4

INTRODUCING GRACENOTES

A GRACENOTE is made by movement of one finger only; a High G Gracenote for instance would be made by raising the finger of that name only and replacing it sharply. This principle applies to all the fingers according to the Gracenote required.

THE SCALE WITH HIGH 'G' AND HIGH 'A' GRACENOTES

Exercise No. 1

This exercise is commenced by covering all the holes on the chanter then raising and replacing the High G finger immediately the blowing commences; repeat the process, but before the High G finger returns to the chanter lift off the Low A finger, the fingers passing one another in mid air, so that when the movement is completed Low A is being sounded. Repeat this procedure with each finger up the scale until F is reached, then make a High A Gracenote to lift off the High G finger; the upward movement is then completed by lifting off the High A finger. Reverse the movements downwards and note that the High A Gracenote is used when replacing the F finger. To avoid slurring make sure the fingers pass one another when off the chanter.



HAND CHANGING EXERCISE WITH G GRACENOTE

Exercise No. 2

When going from bottom hand to top hand notes and vice-versa make sure the fingers are in the proper position for each note and listen carefully for any sign of slurring while changing over from one hand to the other. Play smoothly and evenly.



1.19.5

STRIKES

Exercise No. 3

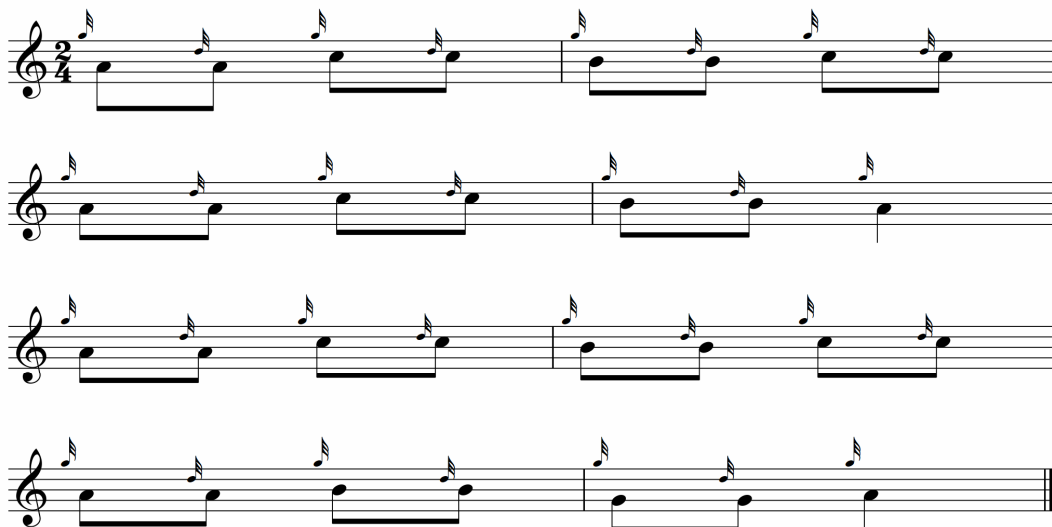
Strikes are used as a means of separating two notes of the same pitch. They are made by striking the chanter with one, two or three fingers simultaneously in order to momentarily cover the holes necessary for the sounding of the note which appears as a Gracenote between them. Play smoothly and evenly.



INTRODUCING D GRACENOTE WITH G GRACENOTE

Exercise No. 4

Commence this exercise by blowing the chanter with Low A finger raised and making a G Gracenote to coincide with the sounding of the Low A following on quickly with the D Gracenote thus giving two Low A's. The same procedure is adopted throughout with each group of two. Ensure that the double sound is heard in each group.

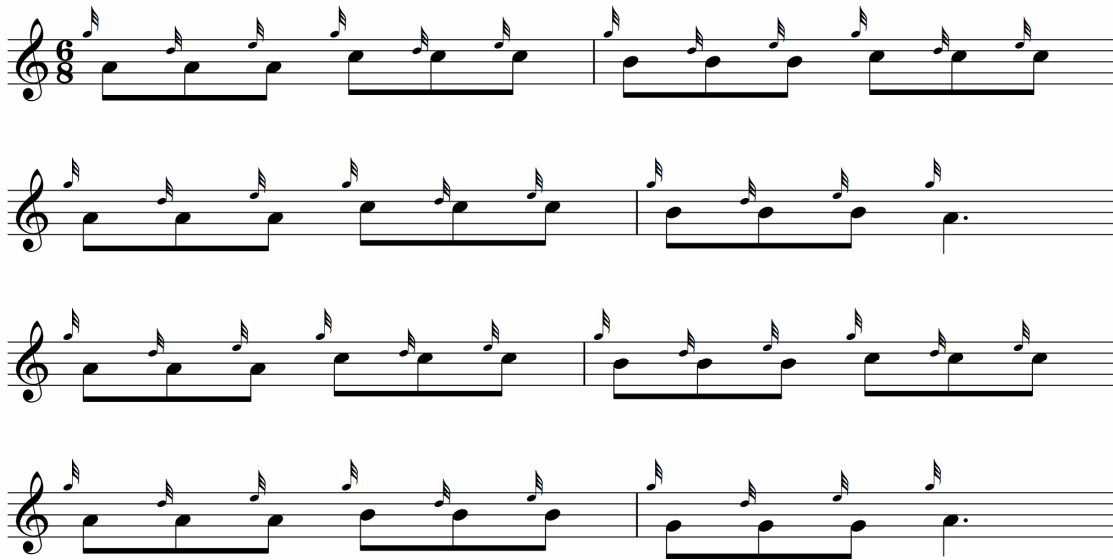


1.19.6

DEVELOPING “G”, “D” AND “E” GRACENOTES

(Exercise No. 5)

Commence this exercise by blowing the chanter with the Low A finger raised and making a G Gracenote to coincide with the sound of the Low A following on quickly with the D and E Gracenotes, thus giving three Low A's. The same procedure is adopted throughout with each group of three.



‘TACHUM’ MOVEMENT

Exercise No. 6

The movement is often used and is played as follows. Sound C with a G Gracenote and return to Low A with a D Gracenote making the ‘Tachum’ sound from which the movement obtains its name. Similarly come to B with a G Gracenote returning to Low G with the D Gracenote.

Open

Closed



1.19.7

INTRODUCING DOUBLINGS

HIGH A AND HIGH G DOUBLINGS

(Exercise No. 7)

Doublings are exactly what the word implies, that the note is doubled, but it is done rapidly and precedes the sounding of the note proper. The High A doubling, for instance, is made by sounding the High A first then as quickly as possible covering and uncovering the High A hole with the thumb. The High G is made in similar manner but, of course, using the High G finger for the quick closing and re-opening of the hole. See illustrations marked "Open" to learn the movement slowly.

High A Open  High A Closed  High G Open  High G Closed 



F AND E DOUBLINGS

(Exercise No. 8)

The F doubling is made by rising to F with a G Gracenote and following rapidly with another G Gracenote on F. E on the other hand is made by going to E with a G Gracenote and following rapidly with an F Gracenote on E.

F Open  F Closed  E Open  E Closed 



1.19.8

LIGHT THROW, DOUBLING AND STRIKE ON "D"

(Exercise No. 9)

To make the light throw commencing from Low A; sound the Low A, then close the chanter by sounding Low G, rise immediately to D then strike C with the D finger only before finally holding the D.

To make the doubling from Low A; start by sounding the Low A and then rising to D with a G Gracenote following rapidly with an E Gracenote while still holding the D.

To make the strike on D play a G Gracenote following rapidly with a C or Low G strike finally sounding on G.

Throw Open: A single note on the staff with a diagonal slash through it, indicating a throw.

Throw Closed: A single note on the staff with a diagonal slash through it, indicating a throw.

Strike Open: A note on the staff with a diagonal slash through it, indicating a strike.

Stroke Closed: A note on the staff with a diagonal slash through it, indicating a stroke.

OR

Strike Open: A note on the staff with a diagonal slash through it, indicating a strike.

Doubling Closed: A note on the staff with a diagonal slash through it, indicating a doubling.

A sequence of notes on a staff, each followed by a gracenote (G and E), illustrating the doubling technique.

A sequence of notes on a staff, each followed by a gracenote (G and E), illustrating the doubling technique.

A sequence of notes on a staff, each followed by a gracenote (G and E), illustrating the doubling technique.

Throw on D
from Low G

1.19.9

DOUBLINGS ON C, B, LOW A AND LOW G

(Exercise No. 10)

These doublings are made by using G and D Gracenotes. In the case of C it is performed by rising from Low A to C with a G Gracenote and following on rapidly with a D Gracenote while still holding C. B is made in similar fashion, but rising to B. It will be noted that when coming from the High A to these doublings the G Gracenote is omitted.

C Open		B Open		A Open	
C Closed		B Closed		A Closed	



N.B When playing doublings from High G, the High A gracenote is often omitted.

MISCELLANEOUS EXERCISES INVOLVING DOUBLINGS (*Exercise No. 11*)

The following exercises consist of tuneful melodies involving most of the doublings already practised, and should be used as a forerunner to learning tunes.

THE ROUND MOVEMENT – DOUBLINGS *Exercise No. 12*

This exercise is common throughout all forms of pipe music and consists of a doubling on C or B followed by an E Gracenote on a lower note.

BIRL ON LOW A

Exercise No. 13

This gracing is accomplished by bouncing the little finger twice on the Low A hole while flexing the tip of it inwards towards the palm of the hand. The movement is made across the chanter, not up and down, and is often preceded by a G Gracenote which can readily be added when the movement has been properly mastered.

Open Closed With G Gracenote

Played in Waltz Time

1.20.1

PRACTICAL – BAGPIPE MAINTENANCE

A tradesman will take care of his tools, so must every musician take care of their musical instruments.

The musician must become familiar with the various parts of the instrument and how each functions.

THE BAGPIPE - GENERAL DESCRIPTION

The bag is used as a reservoir of air that assists in the provision of a constant level of air pressure to the reeds.

The stocks are secured to the bag and provide connections for the blow stick, chanter and drones, provide housing chamber for the reeds. The stocks must be kept clean to ensure unobstructed airways into and out of the bag.

The Blowstick is used to fill the bag with air. It is fitted with a non-return valve, sometimes referred to as a Clack, which prevents the air from coming back through the Blowstick from the bag.

The chanter is the means by which the melody is provided. The drones provide a constant harmony. The drones are held in place by cords.

THE BAGPIPE - SPECIFIC DESCRIPTION

BAG

Sheepskin, various hides and some maintenance free synthetic materials.

1.20.2

THE BAGPIPE SPECIFIC DECRYPTION (CONT'D)

BAG SEAM

Stitched or glued, or both, depending on material (either natural or synthetic) and on the bag-maker's technique.

STOCKS

Made of wood or synthetic material and tied into the bag (sheepskin etc.) with rot free waxed hemp, or secured in a synthetic bag by tight fitting rings or clamps.

CHANTER

Made in various woods and synthetic materials. Choice of material is very much a case of personal taste, as different materials produce different quality. Most popular wood – African Blackwood.

DRONES

Same as CHANTER specification

BLOWSTICK

Made of wood or synthetic materials. Non-return valve may be of leather or a synthetic unit fitted into the Blowstick.

MOUTHPIECE

Normally made of a synthetic material for durability

BAGPIPE - MAINTENANCE

The bag, if a natural material, must be seasoned regularly to preserve the skin, and prevent loss of air.

The following system may be used :-

1.20.3

BAGPIPE – MAINTENANCE (CONT'D)

1. Cork the stocks and inflate the bag, this gives easy access for the seasoning liquid.

2. The bag should be seasoned in sections as follows :-

2.1 The neck – pour seasoning in through the Blowstick

2.2 The area around the blowstick – pour seasoning in through the blowstick stock

2.3 The area around and between the drones – pour seasoning in through the centre drone stock

2.4 The remainder of the bag – as 2.3

2.5 The seam – as 2.3

N.B Care should be taken to avoid using an excessive amount of seasoning. Any excess seasoning should be drained from the bag.

3. Having seasoned the bag, re-cork the stocks and inflate the bag. There should now be a firmer feel to the bag and no air-loss, or at least a reduction in air-loss.

4. Clean out the inside of the stocks to prevent reeds being stopped by contamination with seasoning and to ensure free airways.

5. Bag-draining is unnecessary if the above items are observed, however, if draining is required the bag may be suspended by the loop provided.

All jointing pins should be airtight, if not, apply hemp. The non-return valve should be airtight. If a leather valve is used, and becomes dry through lack of use, or has just been replaced, it should be allowed to soak in water before use, to ensure air tightness.

Drones should be brushed or 'Pulled Through' to ensure a smooth polished bore to retain original sound quality.

The throat of the chanter must be kept clean, as this has a very critical effect on sound.

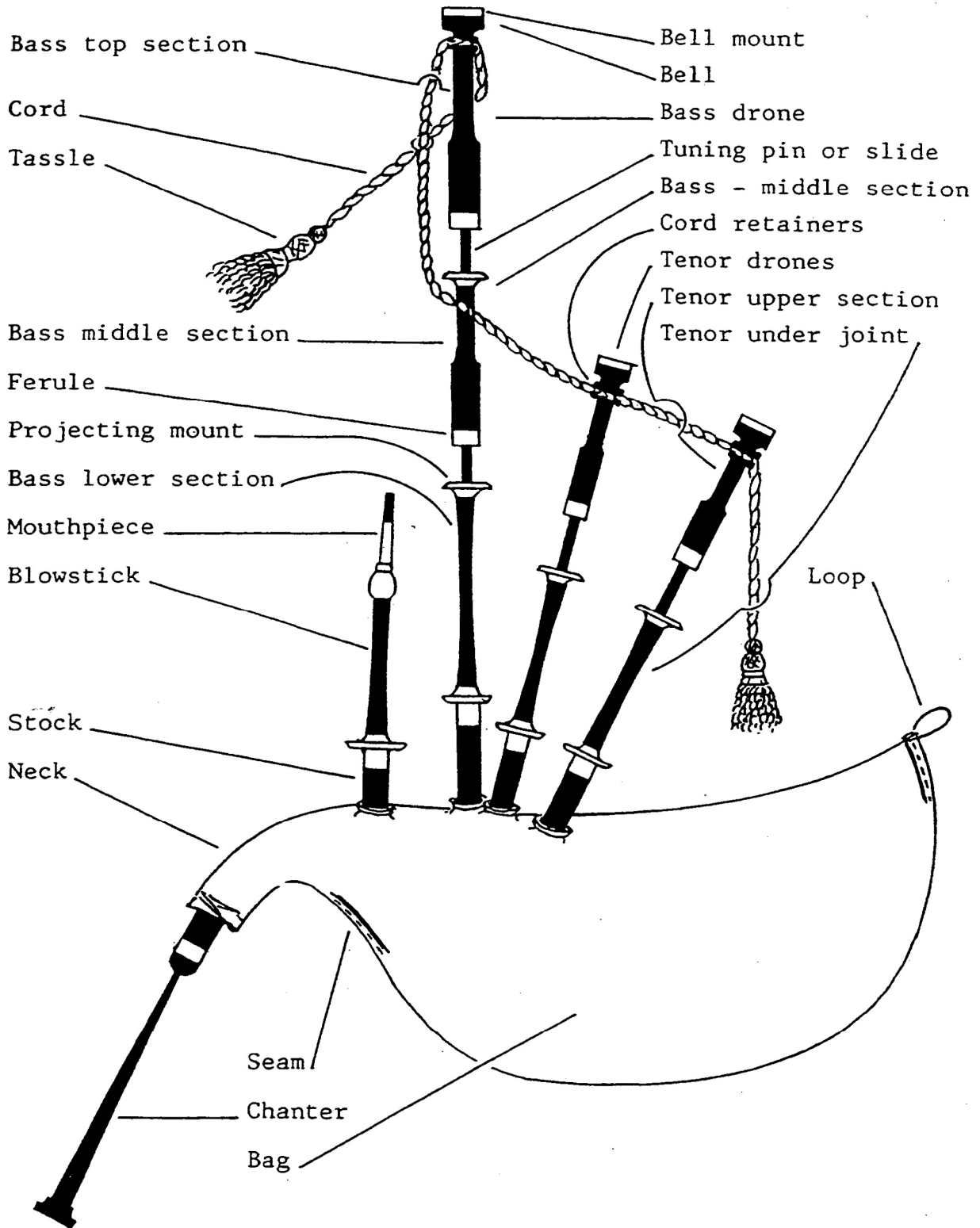
The tuning slides on the drones must be kept at just the right tension to allow ease of tuning.

Drone cords must be maintained so that they hold the drones in place but do not restrict tuning.

The bag cover must not be too tight or it will restrict the inflation of the bag.

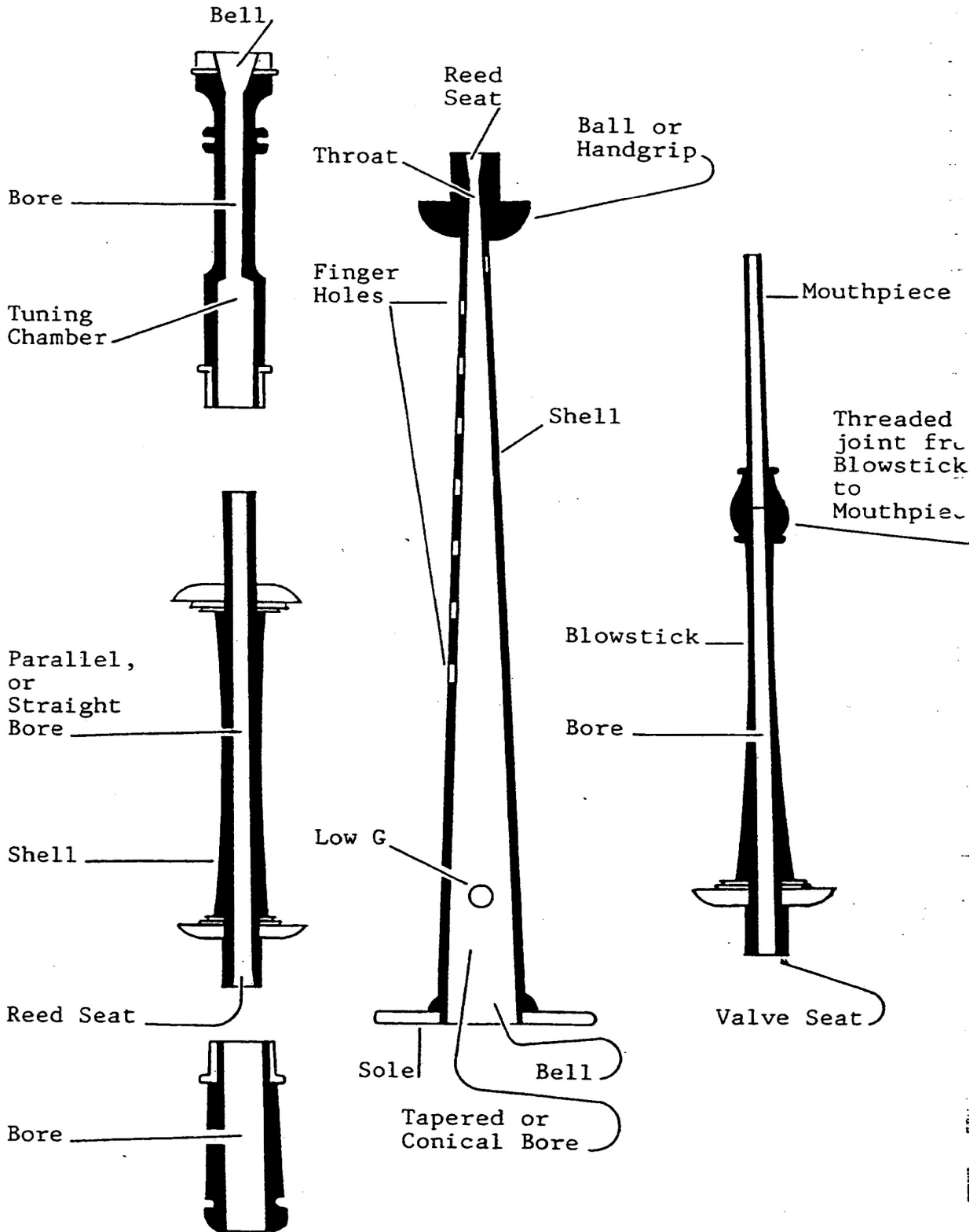
1.20.5

PARTS OF THE GREAT HIGHLAND BAGPIPES



1.20.6

SECTIONED PARTS OF THE GREAT HIGHLAND BAGPIPE



1.20.7

COMMON PROBLEMS

SYMPTOM - AIR LOSS

Problem/Remedy

1. **The bag needs seasoned;** It will feel dry inside, especially at the neck.
2. **Joints not tight enough;** a common problem.
3. **Stocks loose or turning in bag;** Completely re-tie. Note that 'old' tying-in material must be removed
4. **Bag porous;** wet on outside – appears to be sweating, the bag cannot be saved, only replaced.
5. **Reeds taking too much air;** reeds will sound coarse and drones will lack sweetness. The drone top section will come further down the tuning slide than necessary.

Carefully move the tuning bridle towards the sealed end of the drone reed, this will reduce the air flow, improve the sound quality and make the drone top tune further up the tuning slide.
6. **Blowstick valve leaking;** replace.
7. **Stock cracked or split;** Moisture appearing on outside – stock can only be replaced.

SYMPTOM - Wet Reeds

Problem/Remedy

Wet Blowers; More common in young pipers. This will result in drone reeds altering pitch or stopping. May be caused by the condition, or type of bag. A porous bag will cause this.

Fitting a water trap could provide the solution – seek advice since there are various types available.

1.20.8

SYMPTOM - Top Section of Drones Dropping when being tuned.

Problem/Remedy

Inside bore of tuning chamber not parallel; Can be re-hemped to suit, however, a bagpipe maker should be consulted.

SYMPTOM - Drones Squealing

Problem/Remedy

Bridles on reeds too tight or tongue too short.

SYMPTOM - Chanter Skirling or Squealing

Problem/Remedy

Finger fault; reed too easy; reed not vibrating properly; playing in very cold weather; High G or High A too sharp or flat in pitch.

1.20.9

HOW TO TUNE THE BAGPIPES

Blow up the instrument and stop the bass and one tenor drone from sounding, then tune the remaining tenor drone until the sound coming from it seems to be the same as the sound coming from the low A on the chanter, although in reality the sound will be an octave lower. When this has been achieved, sound High A on the Chanter and if the drone does not require any further tuning to be in perfect accord with low A then it may be assumed that the Chanter is in reasonable balance. Should the drone, however, require to be further tuned by sliding the top part upward, then providing the blowing is steady, it means that the High A is flat and to remedy this the Chanter reed should be sunk a little deeper into the reed seat of the Chanter and all that is required to do this is to remove some of the hemp from it. On the other hand should the upper part of the drone require to be adjusted downward to bring it into accord with High A on the Chanter, then the High A is sharp and the reverse procedure should take place and some hemp added to the Chanter reed to raise it slightly in the reed seat. If the Chanter cannot be balanced in this fashion another more suitable reed must be found in order to get the proper responses.

When the first tenor drone has been properly tuned, start up the second tenor drone and bring it into perfect accord with the first one, then follow on with the bass drone bringing it into tune with the tenor drones although in reality the bass will be an octave lower in pitch than the tenor drones.

A great deal of patience and practice is required to become proficient in this art. Development of this skill will be improved by seeking assistance from an experienced player.

1.20.10

BLOWING THE BAGPIPES

To attain the correct position for the bagpipe the following procedure should be adopted.

1. The drones should be laid across the left shoulder with the left arm encircling the bag.
2. The fingers of the left hand should hold the chanter such that the High A, High G and F holes are covered. The E hole remains open.
3. With the right hand place the Blowstick in the mouth.
4. Blow into the bag until it is full, ensuring that the left hand is held high enough to allow the bag as it fills to lie against the inside of the forearm.
5. When the bag is completely filled, it is necessary to blow, and at the same time strike the bag, beneath and behind the position of the bass drone, with the right hand in such a manner that the bag is pressed against the left forearm. This causes the drone reeds to vibrate properly.
6. As the drones begin to sound, the bag should be moved to a position beneath the armpit where pressure from the upper arm is applied to sound the note E from the chanter.

Pressure exerted by the left arm on the bag, compensates for the loss in air supply, when the player is taking a breath. As blowing restarts, arm pressure decreases and by alternating blowing and arm pressure, a uniform flow of air is supplied to the reeds.

The next stage is to practice playing "up and down" the scale slowly. The player should listen carefully to each note for increase or decrease in pitch, particularly when changing from blowing to pressing and vice-versa. Maintaining a steady pressure is one of the chief essentials to becoming a proficient player of THE GREAT HIGHLAND BAGPIPE.

1.21.1

THE SNARE DRUM

The art and practice of the Snare Drum

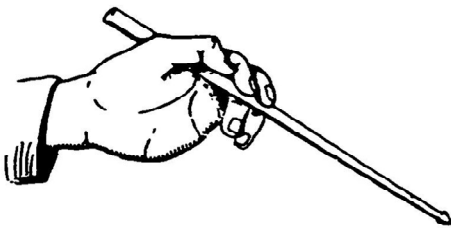
There is no shortcut to proficiency in this art; hard work and unlimited patience are keynotes to success. Diligent practice, coupled with a high degree of concentration is essential if one's efforts are to be rewarded. Careless manipulation and faulty timing should never be tolerated, for bad habits, once formed, are extremely difficult to eradicate.

Holding the drum sticks

To acquire good technique, learning to hold the drum sticks correctly in an accepted manner is essential. The method traditionally accepted by the majority of pipe band drummers is illustrated below.

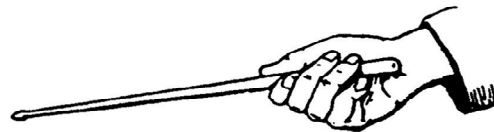
The Left Stick

The left stick should be held about three inches from the butt end, between the thumb and forefinger and resting between the first and second joints of the third finger, palm upwards.



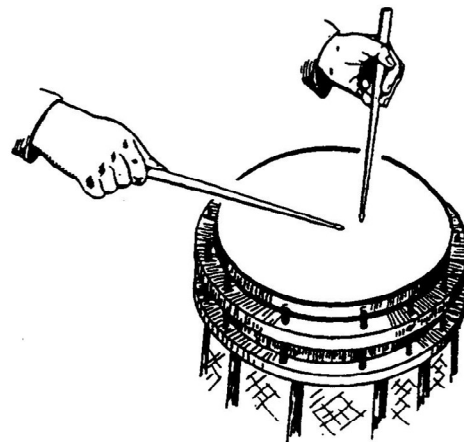
The Right Stick

The right stick is grasped at the point of balance between the thumb and forefinger palm downwards; the remaining fingers grouped loosely around it.



The Beating Position

To obtain this, hold the stick as instructed, immediately over the beating surface, but not quite touching it.



1.21.2

TUTOR NOTATION FORMAT

To simplify matters for the beginner, all exercises in this Tutor show the note heads above and below a straight line to denote either:

Right Hand and Left Hand movements

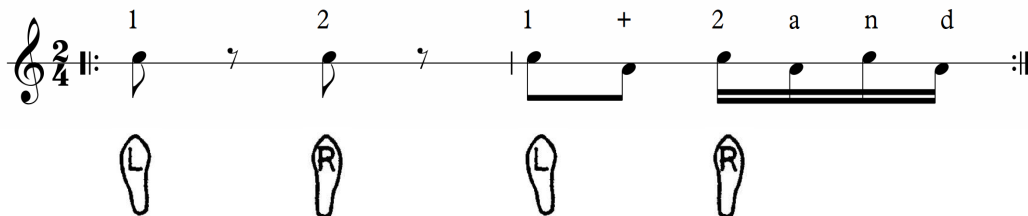


Or Left Hand and Right Hand movements



At the students discretion

As an aid to hand and foot co-ordination, the counting exercises show foot taps for each beat to give the student a better picture of the beat notes being sub-divided.



1.21.3

SINGLE STROKE BEATING

(Exercise No.1)

Hold the sticks in the beating position above the practice pad. To strike the pad, flick the head of the stick in an upward arc movement to about shoulder level before smartly striking the pad and returning the head of the stick to about shoulder level again. While one hand is falling, the other should be rising.

The movement is made by the **wrist** – not the arm!

Before commencing this exercise, the student is advised to check on the correct manner of holding the sticks.

Diligent practice ensuring the strokes are equidistant and equal in weight will produce good stick control.

Count

1 2 1 2 1 2 1 2

Foot tap

Continue practicing the above until a sense of stick control and an even strength of beating is acquired.

1.21.4

COUNTING BEATS AND THEIR EQUIVALENTS IN SIMPLE TIME (Exercise No.2)

Most music is written with either 2, 3 or 4 beats in each bar but these beats are usually broken up into notes of lesser values. The exercise below shows the beat note as a crotchet and demonstrates how lesser values (quavers and semiquavers) can be counted.

As a further aid to understanding the value of each beat, it is useful to beat time by tapping feet alternately. It is also good practice to count aloud.

Count 1 2 1 2

Foot Tap

Count 1 + 2 + 1 + 2 +

Foot tap

Count 1 a n d 2 a n d 1 a n d 2 a n d

Foot tap

Counting exercises in Simple Duple Time (2 beats per bar)

Count 1 2 1 + 2 1 + 2 + 1 2

Count 1 + 2 a n d 1 + 2 1 + 2 + 1 a n d 2

1.21.5

COUNTING BEATS AND THEIR EQUIVALENTS – IN COMPOUND TIME

(Exercise No.3)

In this exercise the beat note is a dotted crotchet which breaks naturally into 3 quavers. When the beat note is dotted, it is said to be compound time.

This exercise should be practiced by counting aloud and beating time with feet.

Count 1 2 1 2 1 2 1 2

Foot tap L R L R L R L R

Count 1 i d 2 i d 1 i d 2 i d

Foot tap L R L R

Count 1 i d n i d 2 i d n i d 1 i d n i d 2 i d n i d

Foot tap L R L R

Counting Exercises in Compound Duple Time (2 beats per Bar)

Count 1 2 1 + + 2 1 + + 2 + + 1 2

Foot tap L R L R L R L R

Count 1 + + 2 i d n i d 1 + + 2 1 + + 2 + + 1 i d n i d 2

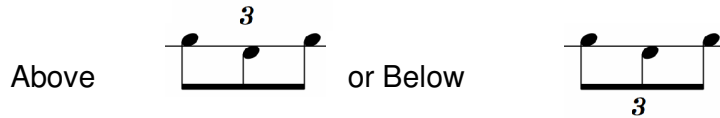
Foot tap L R L R L R L R

1.21.6

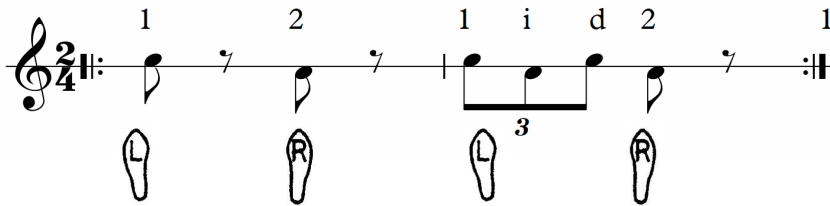
COUNTING BEATS AND THEIR EQUIVALENTS – IRREGULAR GROUPS TRIPLET

Exercise No.4

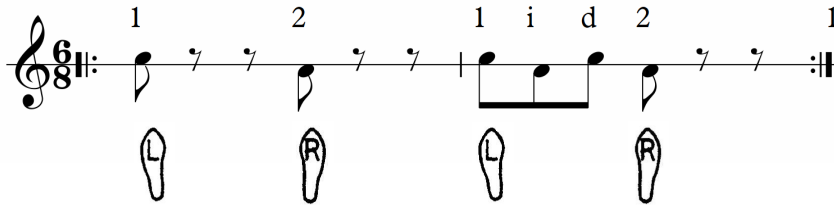
When a three quaver beat of compound duple time is introduced into a simple duple time setting, the three notes must be arched by a slur and a figure 3 written as shown.



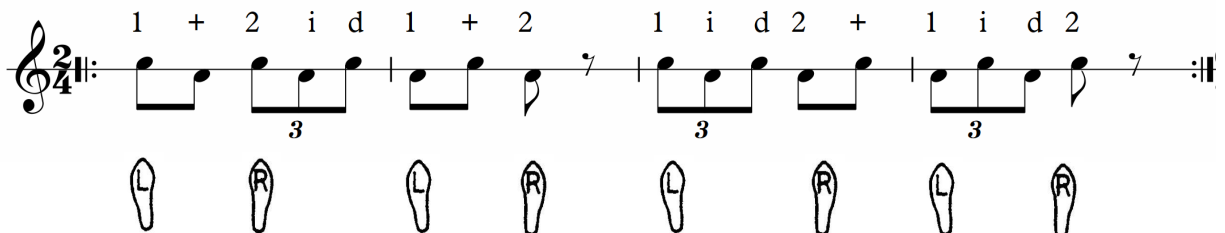
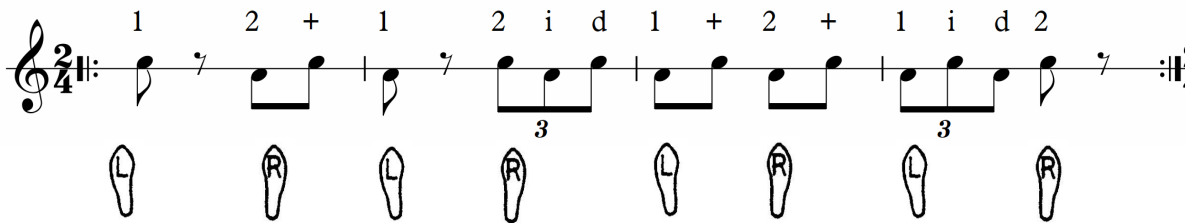
These three notes, called a triplet, must be played in the time of two of equal value. This is known as an **irregular group** as it is out with its regular time setting.



To check that correct rhythm is being achieved play;



It should sound exactly the same!



1.21.7

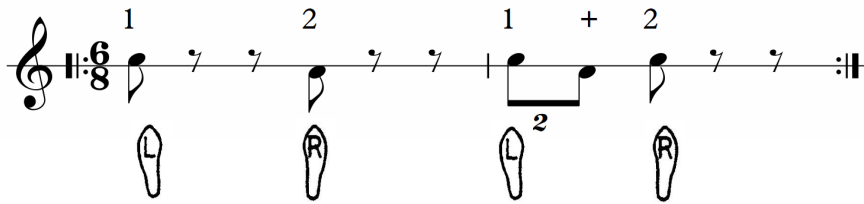
EXERCISE No.4 (Continued)

COUNTING IRREGULAR GROUPS (DUplet)

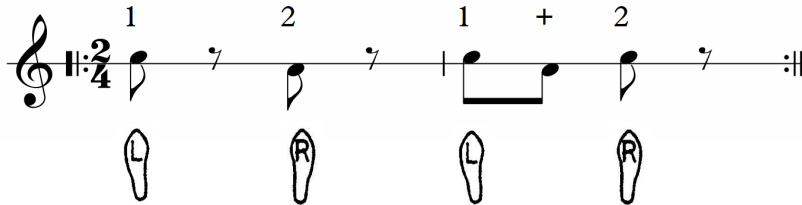
When a two quaver beat of simple duple time is introduced into a compound duple time setting, the two notes are arched by a slur and the figure 2 written as shown.



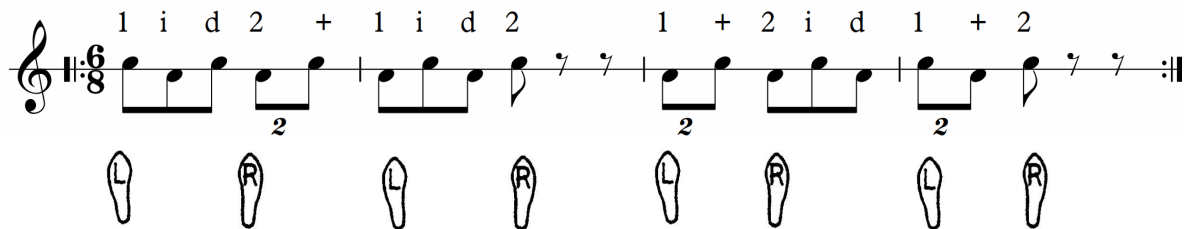
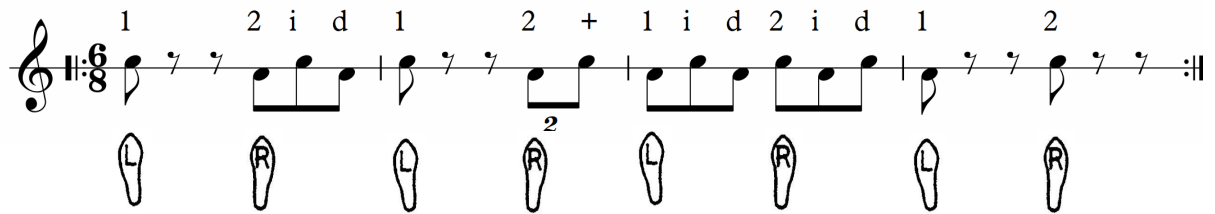
These two notes, called a duplet, are played in the time of three of equal value. This also, is an **irregular group**.



To check that correct rhythm is being achieved play;



It should sound exactly the same!



1.21.8

FURTHER EXAMPLES OF COUNTING IN SIMPLE TIME

All counting exercises should be played slowly at first and practiced until a good sense of timing is acquired. Only then should the speed be built up.

In the examples below, periods of silence, shown by rest signs, are included and are explained in full in the theory section of this book

Simple Duple Time (2 Beats Per Bar)

1 2 1 + 2 1 + 2 + 1 + 2

1 n d 2 n d 1 a n d 2 + 1 2 n d 1 i d n d 2 +

1 + 2 a n d 1 i d 2 1 n d 2 a n 1 a n d 2

1 + 2 + 1 + a 2 1 a n d 2 a n 1 + 2

Simple Triple Time (3 Beats Per Bar)

1 2 3 1 + 2 3 1 + 2 a n d 3 1 + 2 + 3

1 + 2 + 3 + 1 + 2 + 3 + 1 + 2 3 1 2 3

1 2 + 3 a n d 1 + 2 3 + 1 2 + 3 + 1 2 a n d 3 +

1 2 3 + 1 n d 2 3 1 a n d 2 + 3 1 + 2 a n d 3

Simple Quadruple Time (4 Beats Per Bar)

1 2 3 4 1 + 2 3 + 4 1 a n d 2 + 3 4 1 n d 2 + 3 + 4

1 2 a n d 3 4 1 + 2 i d 3 + 4 1 n d 2 n d 3 + 4 1 2 + 3 + 4

1 2 + 3 4 + 1 + 2 a n d 3 4 n d 1 2 n d 3 4 1 + 2 a n d 3 4 +

1 2 3 i d 4 i d 1 n d 2 + 3 n d 4 1 i d + 2 3 n d 4 1 + 2 + 3 n d 4

1.21.9

FURTHER EXAMPLES OF COUNTING IN COMPOUND TIME

These exercises should also be practiced by counting aloud an debating time with feet alternately.

Compound Duple Time (2 Beats Per Bar)

1 2 1 i d 2 1 i d 2 + 1 d 2

1 i d 2 i d 1 i d 2 1 i d 2 i d n i d 1 2

1 2 i d 1 i d 2 i d 1 + 2 + 1 i d 2

1 i d 2 i d 1 + 2 1 i d n i d 2 i d 1 i d 2

Compound Triple Time (3 Beats Per Bar)

1 2 3 1 i d 2 3 1 i d 2 3 i d 1 2 i d 3 i d

1 i d 2 i d 3 1 i d 2 i d 3 1 i d 2 i d 3 1 i d 2 3

1 i d 2 3 i d 1 i d 2 3 1 i d 2 + 3 i d 1 i d 2 i d 3

1 i d 2 i d n i d 3 i d 1 2 i d 3 i d 1 i d 2 3 i d 1 i d 2 i d 3

Compound Quadruple Time (4 Beats Per Bar)

1 2 3 4 1 i d 2 i d 3 4 1 2 i d 3 i d 4 1 i d 2 3 i d 4

1 i d 2 3 i d 4 1 2 3 i d 4 1 2 3 i d 4 1 i d 2 i d 3 4

1 2 i d 3 i d 4 1 i d 2 i d 3 + 4 1 i d 2 i d 3 i d 4 1 i d 2 i d n i d 3 i d 4 i d

1 i d 2 i d 3 + 4 i d 1 i d 2 i d 3 i d 4 i d 1 2 3 i d 4 1 i d 2 3 i d 4

1.21.10

SINGLE STROKE DEVELOPMENT

(Exercise No.5)

Single alternate strokes are extensively used in Pipe Band drumming and is commonly referred to as "hand to hand" playing. This simply means that the sticks alternate when striking the drum, each stick playing a single stroke at a time.

The exercise should start very slowly and gradually work up to such a speed that the effect is in every way similar to that of an open roll. Count aloud and beat time.

The exercise is presented in seven staves, each with a musical staff, a stick diagram, and a rhythmic count. The time signature is 2/4.

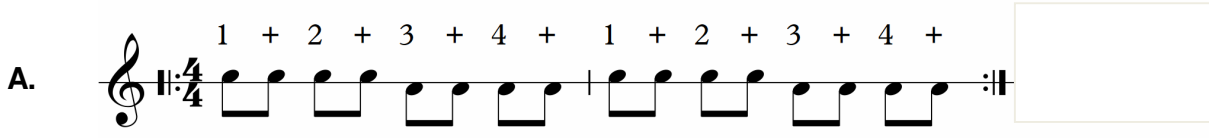
- Staff 1:** Musical staff with notes on the first and third beats of each measure. Stick diagram shows the left hand (L) striking on the first beat and the right hand (R) on the second. Count: 1 2 1 2 1 2 1 2.
- Staff 2:** Musical staff with notes on the first and second beats of each measure. Stick diagram shows L on the first and R on the second. Count: 1 + 2 + 1 + 2 + 1 + 2 + 1 + 2 +.
- Staff 3:** Musical staff with notes on the first, second, and third beats of each measure. Stick diagram shows L on the first and R on the second. Count: 1 a n d 2 a n d 1 a n d 2 a n d 1 a n d 2 a n d 1 a n d 2 a n d.
- Staff 4:** Musical staff with notes on the first, second, and third beats of each measure, with a dense texture. Stick diagram shows L on the first and R on the second. Count: 1 a n d 2 a n d 1 a n d 2 a n d 1 a n d 2 a n d 1 a n d 2 a n d.
- Staff 5:** Musical staff with notes on the first, second, and third beats of each measure, with a dense texture. Stick diagram shows L on the first and R on the second. Count: 1 a n d 2 a n d 1 a n d 2 a n d 1 a n d 2 a n d 1 a n d 2 a n d.
- Staff 6:** Musical staff with notes on the first and second beats of each measure. Stick diagram shows L on the first and R on the second. Count: 1 + 2 + 1 + 2 + 1 + 2 + 1 + 2 +.
- Staff 7:** Musical staff with notes on the first and third beats of each measure. Stick diagram shows L on the first and R on the second. Count: 1 2 1 2 1 2 1 2.

1.21.11

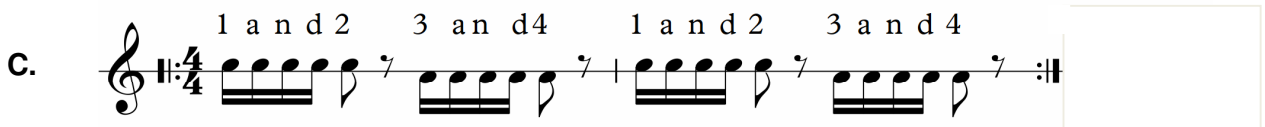
STICK CONTROL EXERCISES

The exercises below are designed to develop stick control. It is important to remember the correct manner of holding and movement of the sticks before commencing any of the exercises.

Play the exercises slowly at first, then gradually increase the tempo until a fairly fast speed has been attained. This must be achieved without interrupting the rhythm of the exercise.

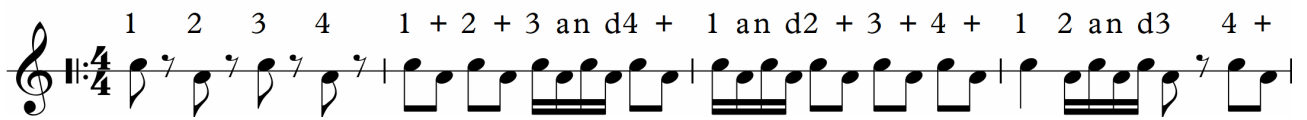
A. 

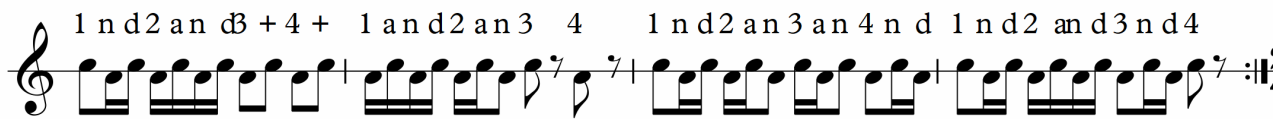
B. 

C. 

D. 

Alternate Single Strokes





THE CLOSED ROLL**(Exercise No.6)**

A roll is the only form of sustaining a note on the snare drum. To acquire a good, clean, close roll takes time, concentration and a lot of patient practice. The following exercise gives a suggestive note picture of a roll, as the actual number of beats is subject to requirements and the ability of the performer. To ensure a good, clean, sustained sound is produced at all times, never hurry this exercise.

Start the roll very slowly and gradually increase the speed making sure that both hands beat with the same weight or volume and that the notes are always played equidistant.

The musical notation for Exercise No. 6 is as follows:

- Staff 1: Treble clef, 2/4 time. Four measures of a single eighth note followed by a quarter rest.
- Staff 2: Treble clef, 2/4 time. Four measures of two eighth notes.
- Staff 3: Treble clef, 2/4 time. Four measures of four sixteenth notes.
- Staff 4: Treble clef, 2/4 time. Four measures of a dense roll of notes, represented by a thick line of notes.
- Staff 5: Treble clef, 2/4 time. Four measures of a dense roll of notes, represented by a thick line of notes.
- Staff 6: Treble clef, 2/4 time. Four measures of a single note with a long slur above it, indicating a sustained roll.
- Staff 7: Treble clef, 2/4 time. Four measures of a single note with a long slur above it, indicating a sustained roll.
- Staff 8: Treble clef, 2/4 time. Four measures of a dense roll of notes, represented by a thick line of notes.
- Staff 9: Treble clef, 2/4 time. Four measures of four sixteenth notes.
- Staff 10: Treble clef, 2/4 time. Four measures of two eighth notes.
- Staff 11: Treble clef, 2/4 time. Four measures of a single eighth note followed by a quarter rest.


FIVE STROKE ROLL DEVELOPMENT

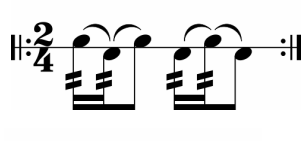
(Exercise No.7)

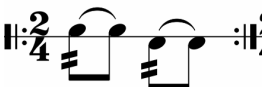
Although rolls vary in length according to requirements, only the 5, 7 and 9 stroke rolls are dealt with at this stage. The numbers here indicate a mechanical approach for learning purposes as duration is subject to requirements and roll quality a matter for the performer. The 5 stroke roll should be practiced until it can be executed equally well on either hand.

- i.e. Starting on right and finishing on right
or
 Starting on left and finishing on left.

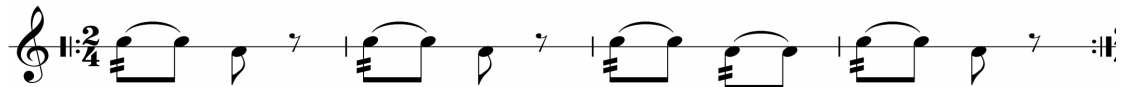
Primary Strokes 

Open Movements 

Closed, Pulsed or "Buzzed" Movements. This produces two buzzes and a tap. 

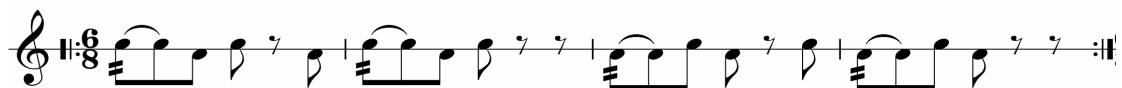
Abbreviated as written. 

The exercises below are written showing the Five Stroke Roll as a Quaver Roll giving alternative hand movements time to develop.

A. 

B. 

C. 

D. 

E. 

1.21.14

SEVEN STROKE ROLL DEVELOPMENT

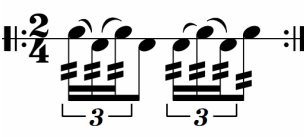
(Exercise No.8)


The 7 stroke has one more pulse (or buzz) than the 5 stroke roll. As with the 5 stroke roll, the student must be able to execute this roll on either hand.

The primary movement of the 7 stroke roll is shown as a triplet of semiquavers (sixteenth notes) with a quaver (eighth note) tap to end.

Primary Strokes 

Open Movements 

Close, Pulsed or 'Buzzed' Movements. This produces three buzzes and a tap. 

Abbreviated as written. 

The following exercises are written as quaver rolls. This is generally the most commonly used value for a Seven Stroke roll in pipe band work.

A. 

B. 

C. 

D. 


E. 

1.21.15

NINE STROKE ROLL DEVELOPMENT


(Exercise No.9)

The 9 stroke roll starts and finishes on the same hand and is made up of four pulses or buzzes and a tap. Like the 5 and 7 stroke rolls it must be able to be played starting on either hand.


Primary Strokes 


Open Movements 

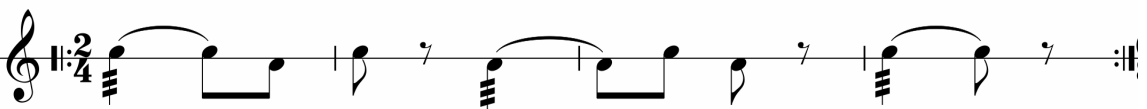
Closed, Pulsed or 'Buzzed' Movements. This produces four buzzes and a tap 

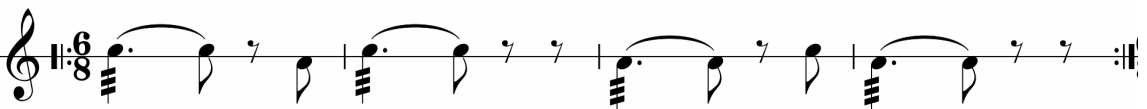
Abbreviated as written 

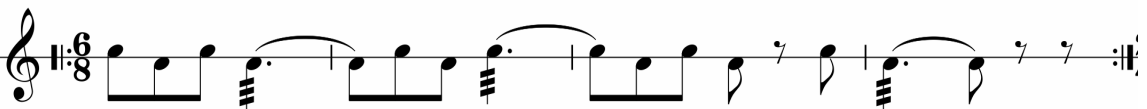
The exercises below should be played with control and equal weight with both hands.

A. 

B. 

C. 

D. 

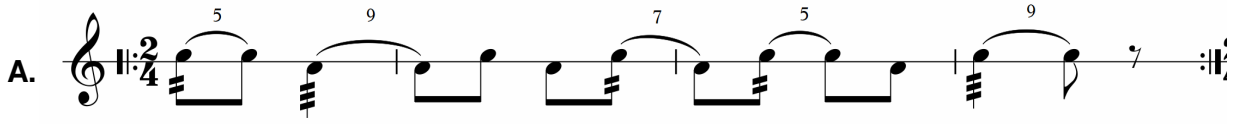
E. 

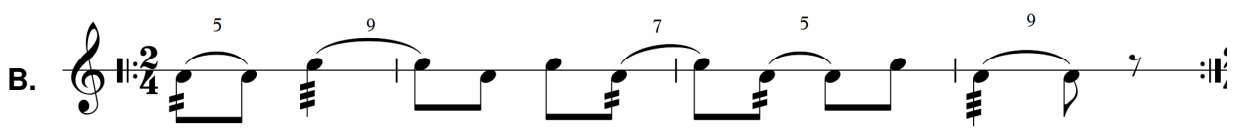
1.21.16

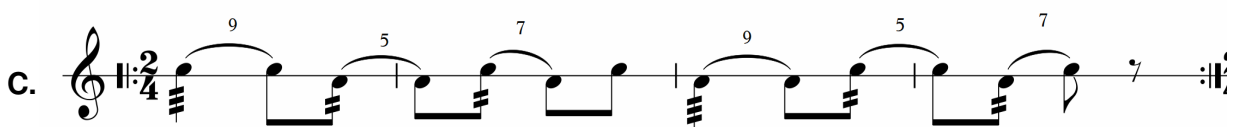
EXERCISES INCORPORATING THE 5, 7, AND 9 STROKE ROLLS.

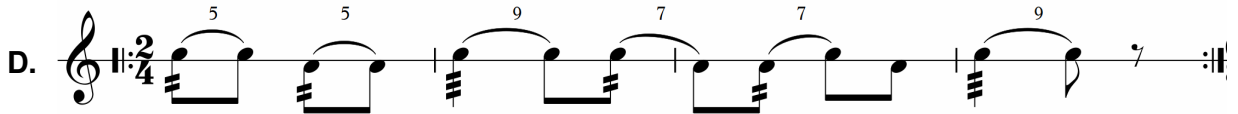
Diligent practice is required to execute the exercises below. Each line should be treated separately initially, but once mastered, they can be played in sequence. **i.e.** A-D, simple duple time. Care should be taken to ensure correct 'fingering' of rolls throughout. The figures above the slur lines indicate the number of strokes per roll. This is purely an aid and should not be confused with a triplet or duplet grouping.

Simple Duple Time

A. 

B. 

C. 

D. 

Compound Duple Time

A. 

B. 

C. 


D. 

1.21.17


THE PARADED

(Exercise No.10)

The Paradiddle comprises of a group of four notes as illustrated below.

i.e. Right, Left, Right, Right 

 then

 Left, Right, Left, Left 

The following should be practised hand to hand until an even rhythmic pattern is obtained. In exercise A, each stroke should be equal in volume and duration.

A. 

In exercise B, the first stroke of the Paradiddle has an accent sign > above it. This shows that the stroke should be played louder than the other three.

B. 

In Exercise C, the first stroke of the Paradiddle is dotted (see Theory Lesson on Dots). As in Exercise A, each stroke should have equal volume.

C. 

Exercises Incorporating Above




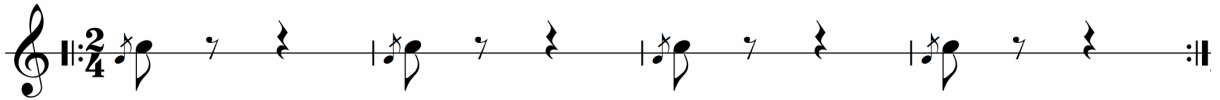



1.21.14

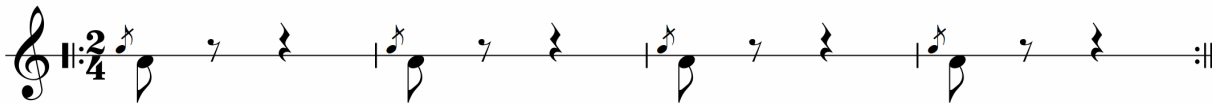
THE FLAM EMBELLISHMENT

(Exercise No. 11)

This rudiment consists of a principle note preceded by a Gracenote. In executing the flam, the Gracenote, written thus , is lightly tapped as close as possible to the principle note, giving a 'pulp' sound. A right hand Flam is made by playing the Gracenote with the left hand and the principle note with the right hand.



A left hand flam is made by playing the Gracenote with the right hand and the principle note with the left hand.



Flam Movements in Simple Duple Time

Right hand
flam on Beat



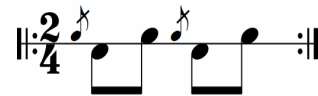
Left hand
Flam on Beat



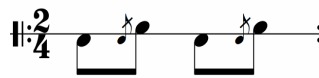
Right Hand
Flam on beat &
Stroke



Left Hand
Flam on beat
& Stroke



Stroke & Right
Hand Flam off
Beat



Stroke & Left
Hand Flam off
Beat



Hand to
Hand



Flam &
Stroke Hand
to Hand



Flam on 1st
& 4th



Dot and Cut







Flam & Stroke
Dot & Cut



1.21.19

FLAM MOVEMENT IN COMPOUND DUPLÉ TIME

Right hand Flam on Beat  Left hand Flam on Beat 

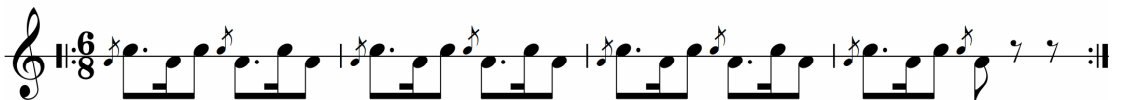
Right Hand Flam on Beat & Stroke  Left Hand Flam on beat & Stroke 

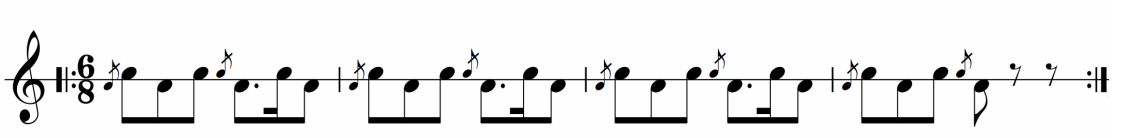
Flam & Stroke 

Flam & Strokes 








Dot and Cut 

Flam & Stroke Dot & Cut 

1.21.20

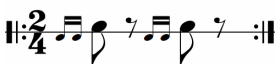
THE DRAG EMBELLISHMENT (Exercise No.12)

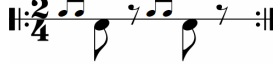
This rudiment consists of a principle note, preceded by two Gracenotes. In executing the drag, the two Gracenotes written thus,  are played on one hand, followed quickly with a stroke on the opposite hand, giving a 'trup' sound.


It should be noted, that although all the following exercises show the drag written thus,  strictly speaking this indicates an 'open' drag. Most pipe band notation is written like this for simplicity, but the sound required is almost always that of a 'closed' drag, which should be written showing a slur, thus  The slur is usually omitted for convenience.


To achieve the proper drag sound, good execution and stick control is required and like all other rudiments, the drag should be practiced hand to hand.


Drag Movement in Simple Duple Time

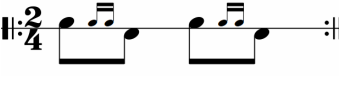
Right hand
Drag on Beat 

Left hand
Drag on Beat 

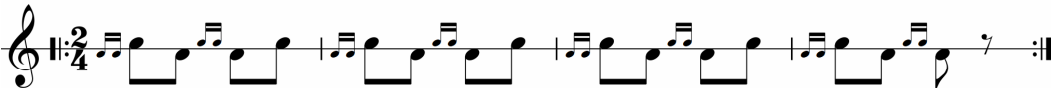
Right Hand
Drag on beat
& Stroke 

Left Hand
Drag on beat
& Stroke 

Stroke & Right
Hand Drag off
Beat 

Stroke & Left
Hand Drag off
Beat 

Hand to
Hand 

Drag &
Stroke
Hand to
Hand 

Drag on
1st & 4th 

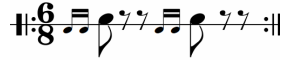
Dot and
Cut 

Drag &
Stroke Dot
& Cut 

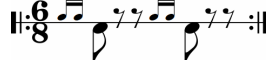
1.21.21

THE DRAG EMBELLISHMENT DRAG MOVEMENT IN COMPOUND DUPLER TIME

Right hand
Drag on Beat



Left hand
Drag on Beat



Right Hand
Drag on beat
& Stroke



Left Hand
Drag on beat
& Stroke



Drag &
Stroke



Drag &
Strokes



Dot and Cut




Drag &
Strokes
Dot & Cut



1.21.22

THE FOUR STROKE ROUGH/RUFF (Either spelling is acceptable)

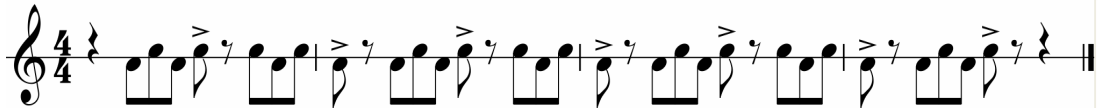
(Exercise No.13)


This rudiment consists of three Gracenotes followed by an accented principle stroke. Execution of the open rough, written thus  is made by four alternate strokes. It is essential to start playing the rough very slowly, keeping a strict tempo and controlling the sticks at all times.

The rudiment should be practiced hand to hand.

Exercise A shows a breakdown of the rough embellishment. Count aloud to gain the correct feeling for execution

A.



Abbreviated as  written.

B.



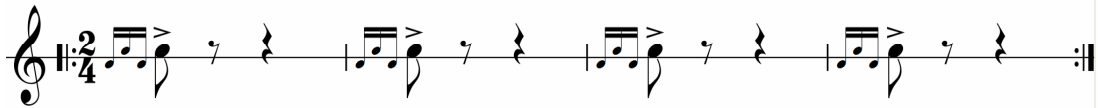
Four Stroke Rough on Right Hand

C.



Four Stroke Round on Left Hand.

D.

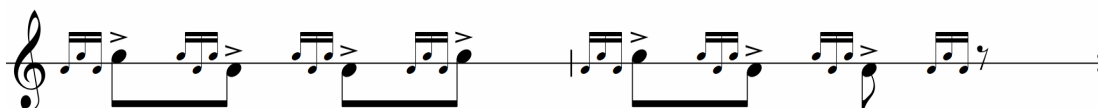
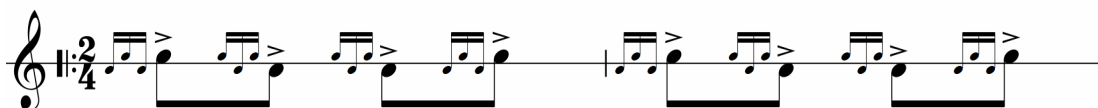


Hand to Hand

E.



F.



1.22.1

THE BASS DRUM TUTOR

The first essentials for a proficient bass drummer are keen senses of Rhythm, Tempo and Touch and these can only be acquired and expressed by diligent practice.

It is entirely erroneous to approach the bass drum thinking that it should always be banged with monotonous weight and regularity, as only on specific occasions is power playing permissible.

The potential dominance of the instrument within the percussion group demands its most delicate handling and understanding, and this can best be accomplished by a thorough understanding of the rudiments of music and a good reading of the score.

The Sticks

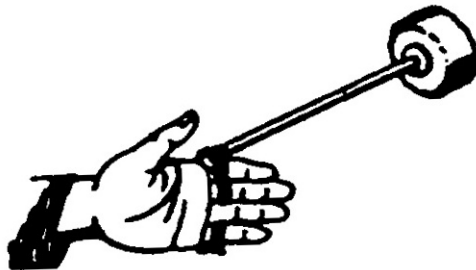
Thin Malacca cane is preferable with either hard Cork or Lambs' Wood heads. The latter being considered the best for tonal effects.

The Holding Tapes

These will have to be adjusted or new ones fitted according to need. The procedure in the latter case is to get 2 feet of quarter-inch wide Wick and cut it in half using one strand for each stick.

Put a strip round the stick and sew tightly on as shown in the diagram. Now hold the stick between the thumb and the side of the forefinger and lace the tape through between the first and second fingers from front to back bringing one strand only back through to the front between the second and third fingers; the other strand passing across the back of the third finger. The two strands are now brought together between the third finger and the pinkie and sewn as required. The 12 inch strands invariably leave a small surplus which is lopped off. This is preferable to risking the tapes being short.

Holding the Sticks (see Diagram)



1.22.2

EXERCISE 1 - LEARNING TO BEAT

The hand movements shown are merely a guide to beginners.

The important feature is the marking of the strong and weak accents.

Practice should commence by standing at attention and bring the sticks up behind the head and making them touch the back of the shoulder blades. Start by bringing the right stick down with a sweeping motion and making a glancing blow, with a flick of the wrist, between the outer rim and the centre of the skin while the hand continues its downward path to the side of the leg. No follow the same procedure with the left stick finishing with both sticks down at the sides of the legs. Put the procedure into reverse, starting again with the right stick followed by the left, making sure that the sticks are touching the shoulder blades and the sides of the legs with every up and downward sweep.

When familiarity with the movements has been acquired, start marking time with the feet and learning to beat at the same time. The downward sweep of the right hand marking the Left foot and the upward sweep the Right Foot, the left Hand doing the in-betweens which are the beats marked "&".

Good tone requires a subdued deep bass, rich in sonorous qualities. Good tensioning of heads is essential for this effect and the heads must be allowed to vibrate freely with no obstruction from sticks, hands or arms.

One of the main functions of the Bass drummer is to mark the correct Tempo and maintain it with strict regularity. Where this does not come naturally a Metronome may be used to advantage by setting it at a given Tempo and practising until confidence is established.

1.22.3

EXERCISE 2 - SIMPLE DUPLER TIME

The following exercises should be practised in the following fashion, starting at a slow Tempo and working up until the required speed is obtained. When regularity has been accomplished attention should be given to the fact that duple rhythms are a repetition of strong and weak accents, the right hand usually marking both of them, the strong (left foot) on the downward movement and the weak one (right foot) on the upward movement. There must always be that modicum of dominance of the strong accent over the weak one for good rhythmical effect.

Tutor Notations Format

To simplify matters for the beginner, all exercises in this Tutor show the note heads above and below a straight line to denote either :-

Right Hand and Left Hand Movements

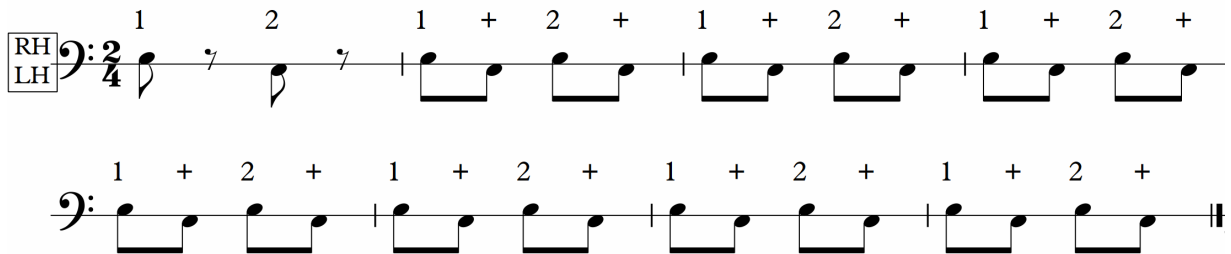


OR Left Hand and Right Hand Movements.

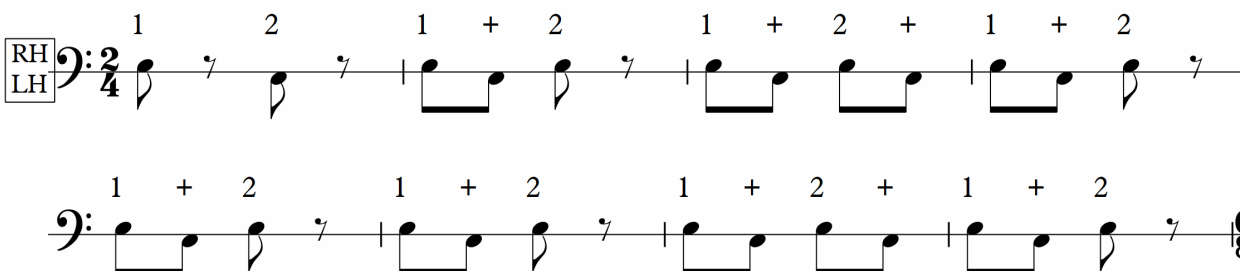


Simple Duple Time

A.



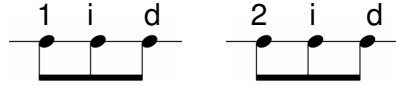
B.



1.21.21

EXERCISE 3 - COMPOUND DUPLÉ TIME

In this exercise the beat note is a dotted Crotchet which breaks readily into three quavers and being in Duple time a bar could be two groups of three quavers, thus



There are only two main beats (Strong, Weak) as in the previous exercise but the left hand in-betweens are not so evenly spaced as the beat is now divided into three and only two are played.

A bar written thus :-shows the spacing, and when repeated gives

an impression of; LONG ----- SHORT ----- LONG ----- SHORT----- etc.

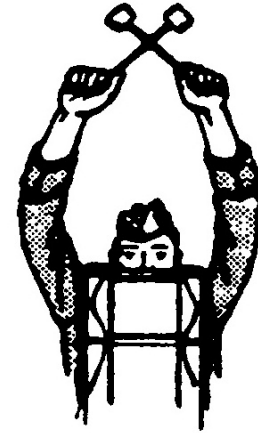
C.

D.

1.22.5

EXERCISE 4 - THE CROSS OVER

Hold both sticks above the head, the arms fully extended and the one stick crossed over the other as per diagram. Commence beating the following exercise by crossing the arms over the top of the drum and beating the right stick on the left side and the left stick on the right side simultaneously.



Continue the movement in criss-cross scissors fashion alternating the hands, the right in front of the left and then the left in front of the right. The first 4 bars of Items "F" and "H" may be used for the 2 Three Pace Starting Rolls.

E.

1 2 1 2 1 2 1 2

RF LF RF LF RF LF RF LF

1 2 1 2 1 2 1 2

RF LF RF LF RF LF RF LF

F.

1 2 1 2 1 2 1 2

RF LF RF LF RF LF RF LF

1 2 1 2 1 2 1 2

RF LF RF LF RF LF RF LF

G.

1 2 1 2 1 2 1 2

RF LF RF LF RF LF RF LF

1 2 1 2 1 2 1 2

RF LF RF LF RF LF RF LF

H.

1 2 1 2 1 2 1 2

RF LF RF LF RF LF RF LF

1 2 1 2 1 2 1 2

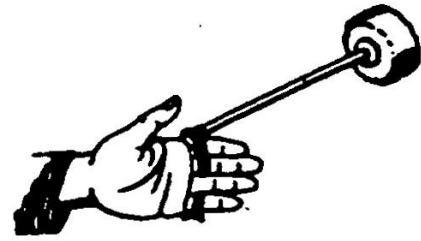
RF LF RF LF RF LF RF LF

1.23.1

THE TENOR DRUM TUTOR

The first essentials are the same as those for the bass drum, namely a keen sense of Rhythm, Tempo and Touch.

The function of the instrument is to enrich the general tonal qualities of the Corps and give added character and expression to features of the score.



The sticks, similar to the bass drum, but slightly smaller in the head, should be nice and soft for best tonal qualities. For one method of holding see diagram.

Exercise 1

The beating position is taken up by standing to attention, raising the hands to the full extent of the arms and crossing the sticks as per bass drummer. Commence beating by dropping the right hand and making the primary (No.1) beat with a flicking movement of the wrist and continuing to move the hand in an outward and downward path to the full extent of the arm then by a small graceful looping movement return to strike again (No.2) on the upward path, the hand continuing upward to about ear level where another minor looping movement at that point sets the repetitive action for the right hand in motion. The action of the left hand is to move down and up striking one intermediate beat for every one by the right hand, rising to ear level on each occasion. When the beating movements have been practised and co-ordinated into a nice flowing rhythmic patten attention should be paid to acquiring that slight dominance for the strong accent which is so essential for all rhythms.



Start practice with Exercises 2 and 3 for the **Bass Drum** until thoroughly acquainted with the counting and different rhythms.

The hand movements shown are merely a guide to beginners. The important feature is the marking of the strong and weak accents.

1.23.2

EXERCISE 2- DEMONSTRATING THE FURTHER USE OF THE REST

Simple Duple time

A.

B.

Compound Duple Time

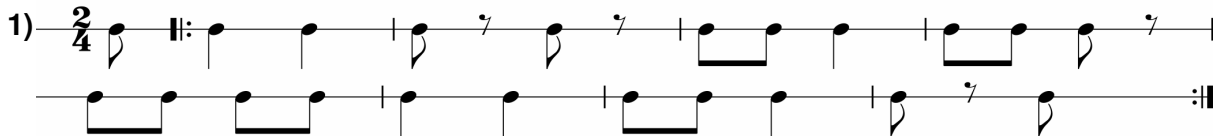
C.


D.


1.24.1

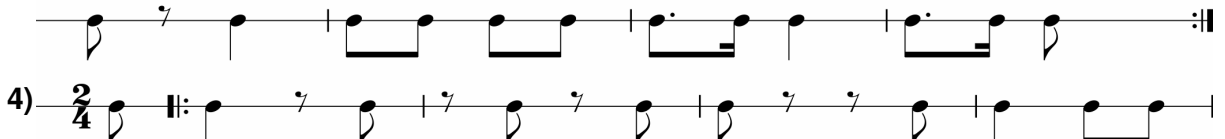
MONOTONE EXERCISES


A few simple exercises suitable for both Pipers and Drummers, illustrating the values of notes and rests in Simple Duple, Compound Duple and Simple Triple time.

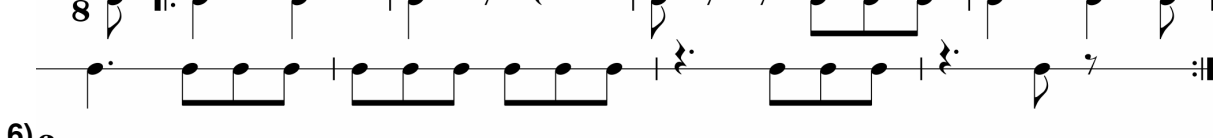
1) $\frac{2}{4}$ 

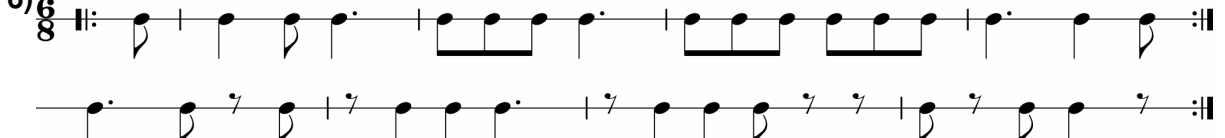
2) $\frac{2}{4}$ 


3) $\frac{2}{4}$ 

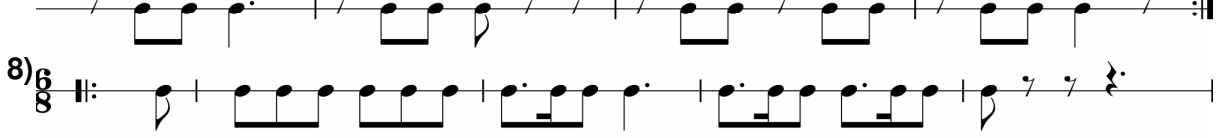
4) $\frac{2}{4}$ 


5) $\frac{6}{8}$ 

6) $\frac{6}{8}$ 

7) $\frac{6}{8}$ 

8) $\frac{6}{8}$ 

9) $\frac{3}{4}$ 

10) $\frac{3}{4}$ 

1.25.1

PRACTICAL - DRUM MAINTENANCE

Three types of drum are in general use in pipe bands.

Viz a viz :-

1. **Side – or Snare Drum**
2. **Bass Drum**
3. **Tenor Drum**

To achieve the best sound from the instrument, the drummer must understand the instrument and how to maintain it.

The Drum – General Description

Although all basically the same, enormous technical and engineering advances, particularly in the snare drum, have resulted in greatly improved instrument performance.

Drums consist of an open ended cylindrical shell or resonator. Skins, generally made of synthetic materials, are stretched over the open ends, thus enclosing a column of air within.

When a skin is struck, the column of air inside the drum is set in motion and causes the shell (or resonator) to vibrate. This strengthens and amplifies the sound produced by the struck skin.

The Drum - Specific Description

Snares

The side or snare drum, as the name implies, differs from the bass and tenor drums in having snares fitted.

Snares comprise of rows of wires, (which can vary in number) and are made to rest against the skins.

On the snare drum, the upper skin, or batter head, has the snare touching the underside. **i.e.** Fitted internally to the drum. This snare provides clarity of sound and ensures intricate movements played on it are clearly heard.

The bottom skin, or snare head, has the snare fitted externally and adds weight to the quality of sound produced. When the batter head is struck, the resulting disturbed column of air within the drum causes this snare to vibrate.

Some types of marching drums have only a bottom snare fitted.

1.25.2

Resonator

Usually made from laminated birch or maple woods although metal alloys have been used.

Heads

Batter and Snare heads were once made of animal hide, hence the term “skins”. The modern heads however are manufactured from very durable synthetic materials.

Drumsticks

Side Drumsticks These vary in material, construction, thickness, weight and tip size, and are made from wood. The most commonly used woods are hickory, maple, ramin, Japanese Oak and laminated woods.

Bass and Tenor Drumsticks These stick heads are normally made from cord, wrapped in felt then covered in lamb’s wool or a similar synthetic material. These sticks are often made to suit personal requirements.

General Care

Tension Rods and Washers:

Keep lubricated with petroleum jelly or similar grease to provide lasting protection.

Avoid temperature extremes, keep the drum in a warm, dry atmosphere.

In wet weather, always dry off the drum.

Monitor wear on the heads as this can result in over tensioning.

On no account should any drum be laid on its side and used to sit on. This causes permanent distortion to the shape and replacement heads can not be fitted.

1.25.3

Common Problems

Under tensioning of heads

This produces a pitch which is too low

Over tensioning of heads

The pitch becomes too high

Under tensioning of snare

This produces an unwanted 'rattle' on the head.

Over tensioning of snare

This results in loss of crispness and clarity of sound. The snare acts like a damper and prevents the head from vibrating properly.

Un-even tension on heads

This results in the head not meeting the snare evenly.
If the head is not struck in the centre, the full tone quality will not be produced.

1.25.4

EXPLODED VIEW OF A 1990 MANUFACTURE 12 ROD SNARE DRUM

